The Mining Journal

RAILWAY AND COMMERCIAL GAZETTE

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 1168—Vol. XXVIII.] LONDON, SATURDAY, JANUARY 9, 1858. [Stamped ....Sixpence. Unstamped..Fivepence.

MR. JAMES CROFTS, MINING AND SHAREBROKER, No. 1, FINCH LANE, LONDON (established 14 years), TRANSACTS every kind of BUSINESS in MINING SHARES, but, not being a DEALER, BUYS and SELLS only on orders confided to him.

The important reduction in the value of money implies a termination to the late crisis, so far as it has been caused or continued by its late unprecedented dearness, and must have an immediate beneficial effect upon all markets, but of the mining market (as a speculative one) in particular. Mr. CROFTS can now confidently anticipate large profits to purchasers who come into the market without delay, and thus avail of the present depressed rates, and especially in mines whose value have been tested by the severe and long-continued pressure,—namely, amongst many others,—

Wheal Edward.	Kitty (Lelant).	West and North Basset.
Vale of Towy.	St. Day United.	East Russell.
Sortridge Consols.	Providence.	Great Wheal Busy.
Pendeen.	Margaret.	Calstock Consols.
Catherine and Jane.	Wheal Basset.	Okel Tor.

Mr. CROFTS is ready to furnish a list of CHEAP SHARES, or such as have receded in value 50 to 75 per cent., and yet have vitality in them to pay profits hereafter.

*** Special business in VIRTUOUS LADY MINE, and OKEL TOR, Calstock, in 4096 shares, either in buying or selling.

MR. JAMES LANE, No. 29, THREADNEEDLE STREET, MINING SHARE DEALER.

JAMES B. BRENCHLEY, DEALER IN MINING, RAILWAY SHARES, &c. 11, ROYAL EXCHANGE, LONDON.

PETER WATSON (13 years' experience), MINING BROKER, STOCK and SHARE DEALER, will EXECUTE all ORDERS entrusted to his care with punctuality. Commission, 2½ per cent. on all transactions. Bankers: Union Bank of London. 57, Threadneedle-street, London, E.C.

MR. LELEAN is a BUYER or SELLER of the following SHARES:—Alfred Consols, Botallack, Carnyorth, Ding Dong, Dolcoath, Levant, North Basset, Par Consols, Providence, Sortridge, South Caradon, Spearne Consols, St. Ives Consols, West Basset, West Caradon, Wh. Kitty (Lelant), Buller, Mary Ann, Reeth, Seton, Trelawny, Wrey, East Basset, East Russell, Lady Bertha, North Levant, Pendeen, Sortridge, Margery. Speculators should make their purchases speedily, as the good times are coming.

Mr. LELEAN has instructions TO LET a PART of a large and handsome HOUSE, situated on the banks of the Thames, six miles from the Bank, and surrounded by pleasure gardens, with an omnibus passing the door every ten minutes. 4, Cushion-court, Old Broad-street.

TO CAPITALISTS.—RELIABLE INFORMATION may be obtained on application to the undersigned, in respect of MISCELLANEOUS SECURITIES generally. BANKS, INSURANCE SHARES, LAND COMPANIES, MINES (British and Foreign), RAILWAYS, FOREIGN STOCKS, and the PUBLIC FUNDS BOUGHT and SOLD at the closest market prices, and at moderate commission. References given and required. JOHN BATTERS, Stock and Sharebroker. 26, Throgmorton-street, London, E.C.

MR. JOSIAH HUGO HITCHINS (Consulting Mining Engineer to the Devon Great Consols) informs his friends and capitalists generally that his PRESENT ARRANGEMENTS will enable him to AFFORD GREATER FACILITY and ADVANTAGE of CONSULTATION on the eligibility and value of MINING INVESTMENTS.

Mr. J. H. HITCHINS will provide correct plans and sections for valuable reference; ensure inspections and ensure reports by the best informed, most experienced, and disinterested agents, and will always, when practicable, perform such responsible duties himself.

Mr. J. H. HITCHINS will visit the mines of Devon and Cornwall, the North of England, Ireland, and Wales, to collect the most trustworthy information and opinions on their general working, state, prospects, and value.

Mr. J. H. HITCHINS values his reputation as the projector, and having been for many years the chief superintendent of those wonderful mines, the Devon Great Consols, and others of great importance; and presumes that the valuable experience acquired and matured by him during his well-known successful development of them will guarantee the best advice to capitalists in their investments, both in dividend mines, and those capable of the greatest and earliest success.

Mr. J. H. HITCHINS will offer his best advice and assistance to the projectors of new undertakings of good promise and probable value, and to existing companies, in effecting the best improvements in the underground and surface departments, the machinery, means, appliances, and management generally, of their mines.

Mr. J. H. HITCHINS has no hesitation in saying that mines, judiciously selected, and effectively worked with sound practical judgment and economy, prove very profitable investments.—Tavistock, Jan. 8, 1858.

MR. E. GOMPERS, MINING SHAREDEALER, 3, CROWN COURT, THREADNEEDLE STREET, LONDON.

TO MINING COMPANIES.—CAPT. JOSEPH RICHARDS OFFERS HIMSELF AS MANAGER AND PURSER OF MINES. Mines Dialled, and Plans and Sections furnished. The Dialling and Mapping of Mines regularly attended to. Mines inspected either in this country or abroad, on reasonable terms. Watervale, Bridestowe, Exeter. North Devon, Jan. 1, 1857.

JAMES H. COCK, MINE SHAREBROKER, GENERAL COMMISSION AGENT, AND ACCOUNTANT, REDRUTH, CORNWALL. Orders for the PURCHASE and SALE of MINE SHARES, MINING MATERIALS, &c., promptly attended to.

CAPT. THOMAS DUNN, of TAVISTOCK, undertakes to INSPECT, REPORT, and SURVEY any MINES or MINERAL PROPERTY in ENGLAND, IRELAND, SCOTLAND, or WALES. No objection to take the management of any mine or mines in the neighbourhood of Tavistock.

MR. PALMER, NORTH DERBYSHIRE MINERAL RECORD OFFICE, MARKET HALL BUILDINGS, CHESTERFIELD, DEALER IN ALL DESCRIPTIONS OF MINING SHARES AND STOCKS. Several Derbyshire mines now offer great advantages to investors.

MR. WILLIAM MICHELL, MINING SHAREDEALER AND COMMISSION AGENT, 3, AUSTINFRIARS, LONDON, E.C.

For the unexpected amount of support W. MICHELL has hitherto received from his friends and the public, he need hardly assure them of his grateful acknowledgments. He would now recommend those who have spare capital to lose no time in allowing him to make a judicious selection of a few mines for investment, as there is no doubt that mining shares will follow the reaction that has taken place in all other stocks and securities, and that great profits may be quickly realised.

W. MICHELL has had 25 years' practical experience in the various branches of mining; and by making periodical inspections of mines in Devon and Cornwall, is better able to make a selection of those mines most likely to give the greatest amount of profit for the smallest outlay.—Jan. 8, 1858.

GEORGE SPRATLEY has FOR SALE the following SHARES at nett prices:—

5 Alfred, £12¼.	2 Wh. Margaret, £42½.	75 Tavy Consols, 16s. 9d.
15 Carnyorth, £5¼.	50 Wh. Harriett, 5s. 6d.	5 Margery, £7¼.
2 Craddock Moor, £40.	10 Wheal Wrey, £5½.	10 Trelyon Cons., £10½.
10 Gonamena, £11½.	5 Calstock Consols, £6.	5 Kitty (Lelant).
5 Herodsfoot, £7¼.	25 Lady Bertha, 16s. 9d.	5 South Carn Brea.
12 Par Consols, £18.	50 North Tavy, 16s.	2 North Frances.
15, Old Broad-street, E.C.		5 North Basset.

HENRY GOULD SHARP, BRITISH AND FOREIGN STOCK AND SHAREDEALER, 32, POULTRY, LONDON, E.C.

SHARES FOR SALE, at nett prices:—

8 Pedn-an-drea, 10s.	70 Bull. & Bass. Unit., 7s.	20 Vale of Towy, 17s. 6d.
90 Molland, 1s. 1d.	200 Chancellorsville, 2s. 3d.	20 Great Hewas, 17s. 6d.
150 East Hender, 10s.	20 Sortridge Con., 29s. 6d.	25 Angarrack, 20s. 6d.
10 Buller and Bertha, 5s.	10 Wh. Edward, £7 10s 6d.	30 Lady Bertha, 17s. 6d.
10 South Bog, 18s. 6d.	30 E. Wh. Russell, 61s 6d.	100 W. Grenville, 4s. 4½d.
60 Wheal Harriett, 6s.	1 Wh. Margaret, £44¼.	50 Kelly Bray, 25s. 6d.

SHARES WANTED.—100 Times Fire, 2s. 9d.; 100 Unity Fire, 6d.; 25 Tincroft, £3 4s. 6d.—Bankers: London and Westminster Bank, Lothbury.

MR. GEORGE BUDGE, of 4, BIRCHIN LANE, CORNHILL, LONDON, has SHARES FOR SALE at the following prices:—

50 Gawton, 12s. 3d.	50 Tincroft, £3¾.	100 College Mines, 3s. 3d.
50 Cath. and Jane, 6s. 7d.	100 Wheal Zion, 14s. 6d.	50 Tamar Consols, 19s.
25 Boiling Well, 29s.	2 Mary Ann, £45.	50 Pedn-an-drea, 12s.
10 Gt. South Tolgus, £15.	2 Treiawny, £37.	20 North Buller, £5½.
100 Bull. & Bass. Unit., 8s.	10 Clij. and Wentw., £6½.	100 Sortridge Consols.
2 Devon Gt. Con., £428½.	25 Great Wheal Busy.	50 Trewetha, 17s. 6d.
100 Wheal Harriett, 6s.	50 Drake Walls, 39s.	10 West Alfred, £36½.
100 Nor. Wh. Wrey, 2s. 6d.	10 East Margaret, £2½.	10 Wheal Emma.
10 West Basset, £24½.	200 W. Grenville, 4s. 7d.	200 Redmoor, 9s.
25 Wheal Edward.	50 Lady Bertha.	100 St. Day United, 16s. 3d.
20 North Basset, £15¼.	100 East Hender, 8s. 9d.	50 E. Wh. Russell, £3 3s.
30 South Carn Brea, £4½.	5 Herodsfoot.	2 Trumpet Cons., £19½.
35 Pendeen, £3¼.	5 Alfred Consols, £14.	3 Wheal Buller, £900.

GEORGE MOORE, DEALER IN MINING SHARES. 1, CROWN COURT, THREADNEEDLE STREET.

GEORGE MOORE will SELL the following SHARES, or any part, at quoted prices, FREE OF ANY COMMISSION:—

DIVIDEND.

5 Alfred Consols, £13¾.	5 Par Consols, £19.	25 Vale of Towy, 17s. 3d.
25 Drake Walls, 28s. 6d.	1 Rosewarne Unit., £23.	5 West Basset, £25.
5 Herodsfoot, £8.	50 Sortridge Con., 29s. 3d.	1 Wheal Arthur, £4¼.
10 Hingston Down, £3¾.	1 South Frances, £215.	1 Wheal Mary Ann, £46.
10 North Basset, £15.	20 Tamar Cons., 19s. 9d.	2 Wh. Trelawny, £37½.
	20 Trewetha, 15s.	

NON-DIVIDEND.

20 Devon Buller, 12s. 6d.	10 Great Wheal Alfred, £4 8s. 9d.	15 North Downs, 29s.
10 East Alfred, 41s. 3d.	20 Great Wheal Baddern, 16s. 3d.	5 North Frances, £12½.
1 East Basset, 102½.		10 Pendeen Consols, £3¼.
20 East Rosewarne, £¾.		5 South Carn Brea, £4¼.
20 East Tamar, 17s. 6d.	25 Kelly Bray, 31s.	10 Wheal Edward, £7¾.
20 E. Wh. Russell, £3¼.	25 Lady Bertha, 17s.	20 Wheal Grenville, £1½.

GEORGE MOORE is a BUYER of Great Baddern and Wheal Zion.

GEORGE MOORE will be happy to render detailed information on written or personal application.—Jan. 8, 1858.

MESSRS. J. J. REYNOLDS AND SON, No. 1, ROYAL EXCHANGE BUILDINGS, LONDON, E.C., ENGLISH AND FOREIGN STOCK, RAILWAY, AND MINING SHAREBROKERS, beg to inform their friends and the public that the present time is a FAVOURABLE OPPORTUNITY for INVESTMENT in many undertakings of a substantial character, paying dividends worthy the attention of the capitalist.

Every information can be obtained at their offices, which their practical experience enables them to give, not only of mines and other properties of established value, but of those that are not.

MESSRS. POWELL AND COOKE, 8, HERCULES CHAMBERS, OLD BROAD STREET, LONDON.

After the long depression that has existed, we feel much pleasure in noticing a better tone in the Mining Market. Several good mines that have declined in price, owing to the cause named (while their prospects have much improved), will advance very considerably during the coming three months. And we are of opinion that an investment in the following mines would prove highly remunerative. The following table will show the highest prices attained during the past year, and the present market value of the shares named:—

	Highest price.	Present price.
Wheal Edward	£10½	£7½ 7¾
St. Day United	1¾	⅞ 1
Vale of Towy	21s.	16s.6d. 17s. 6d.
East Wheal Russell	—	3 3¼
Drake Walls	3¼	1¾ 1⅞
Great Hewas	1¼	16s. ⅞
Wheal Kitty (St. Agnes)	8	3½ 4
Calstock Consols	6¼	5¾ 6
Tincroft	5½	3¾ 3½
Great Wheal Busy	7¾	6¼ 6¾
North Frances	22	11¾ 12¼
Hingston Down Consols	—	3½ 4
Porkellis United	10¾	5½ —
North Wheal Robert	4	2½ 3
Great Wheal Alfred	16	4¼ 4¾
West Par	—	⅞ ⅞
North Levant	5	3¼ 3½
Virtuous Lady and Wheal Bedford	—	1 1¼
Wheal Basset	274	150 160
Wheal Buller	34	260 280

Many other mines in the list are well worth the attention of parties who are disposed to run the risk of a small loss, with the view of making large profits.

Messrs. POWELL and COOKE will be happy to afford information (to those requiring it) as to the mines which afford the greatest chances of success; and will transact any business entrusted to them at nett prices, or on commission, at 2½ per cent.

JAMES HERRON has FOR SALE the following SHARES, at the prices quoted, and FREE OF COMMISSION:—

10 Boiling Well, 28s. 9d.	20 Holmbush, 27s. 9d.	30 Sou. Condurrow, 3s. 9d.
25 Balnoon Cons., 12s. 9d.	2 Kitty (Lelant), £12½.	20 Tamar Consols, 19s. 6d.
25 Cath. and Jane, 6s. 9d.	20 Kelly Bray, 32s. 9d.	1 Trumpet Cons., £18¾.
1 Cefn Brwyno, £41.	10 Lady Bertha, 18s. 9d.	5 Tincroft, £3 15s.
20 Chancellorsville, 2s. 9d.	20 North Trelawny.	10 Trewetha, 15s.
30 College Mines, 3s. 3d.	20 North Tavy, 41s. 6d.	1 Trelawny, £28½.
10 Drake Walls, 32s. 6d.	4 North Basset, £16¼.	20 Vale of Towy, 18s. 9d.
20 Dyffryn Castell.	20 North Downs, 29s. 9d.	5 Wheal Wrey, £5¼.
20 East Tamar.	20 Pem. & E. Crin., 11s. 9d.	25 Wheal Cupid, 9s. 9d.
10 East Trefusis, £4¾.	20 Pedn-an-drea, 16s. 9d.	1 Wheal Margaret.
6 East Wh. Rose, £7¾.	10 Pendeen Consols, £3¼.	1 Wheal Mary Ann, £44 18s. 9d.
4 Forest.	1 Rosewarne.	
20 Gawton United.	20 South Bog (Limited), Shropshire.	5 Wheal Edward, £7¾.
5 Great Alfred, £4 8s. 9d.	5 St. John del Rey, £12 18s. 9d.	3 West Basset, £25¾.
5 Grenville, 35s.	1 South Caradon, £355.	10 West Par, 8s. 9d.
20 Great Hewas, 16s. 9d.	10 St. Aub. & Grylls, £4¼.	20 West Grenville, 4s. 9d.
480 Gwydyr.		3 West Sharp Tor, £31.
5 Hingston Down.		

It is quite evident money will soon become a perfect drug in the market, and this must stimulate speculation, which has for some time been dormant, and no property will so quickly be affected as that of mining. The fact is undoubted, that many mines, owing to the late stagnation of business, are to be bought at 30 per cent. discount, that ought to be at a considerable premium; and it only requires proper care in their selection to make in a short period a fortune of as many thousands as hundreds are invested. As shares in such mines are now being daily taken off the market, it is desirable that those who intend purchasing should delay doing so as little as possible.—2, Adam's-court, Old Broad-street, London, Jan. 8, 1858.

MESSRS. VIVIAN AND REYNOLDS, MINE AGENTS. 68, OLD BROAD STREET, LONDON, E.C.

Messrs. VIVIAN and REYNOLDS are enabled, through the long experience of Mr. W. C. Vivian as an underground agent and manager of mines in Cornwall, and in various foreign countries, to afford information on most important mining districts; and to inspect and report on mines. They are also enabled, by the several years' acquaintance of Mr. J. J. Reynolds, jun., with the transaction of the London share market, to obtain every advantage for those who may want either to buy or sell mining or any other description of stock.

Messrs. VIVIAN and REYNOLDS have daily information from the principal seats of mining, which is at the service of those who may honour them with their confidence.

Mining stock has been depreciated in market value by the late severe pressure on the money market, and the rapid decline in the price of metals; but money has again become plentiful, as shown by the great reduction which has already taken place in the rate of discount in the Bank of England, and the still further reduction contemplated. And the downward tendency in the price of metals has not only been arrested, but, as the drop was the result entirely of the financial pressure, it is anticipated, as a fair inference, that mining produce will soon again command a higher value. The present period is, therefore, a particularly favourable one for investing in mines, as there are several causes tending to advance the value of mining property, and there seems at present every probability that the commencement of the year 1858 is the beginning of a prosperous mining era, in which those capitalists who invest in sound mining undertakings, selected by agents that are practically acquainted with the localities, and with those features in mines which constitute the elements of success, will meet with rich prizes.

MR. W. H. BRUMBY, STOCK AND SHAREBROKER, 1, QUIET STREET, BATH, is in a position to give the BEST ADVICE in the SELECTION and PURCHASE of DIVIDEND and PROGRESSIVE MINES.

JOHN GLEDHILL AND CO., MINE AGENTS, SHARE BROKERS, AND GENERAL DEALERS. MINING RECORDS OFFICE, 12, SOUTH PARADE, LEEDS.

Mines well selected are the best investments, paying from 15 to 30 per cent. on the outlay. They have to OFFER SHARES in most of the DIVIDEND and PROGRESSIVE MINES, and are ready to give every information relative to all mining matters.—Dated Jan. 8, 1858.

MR. FRANCIS R. BILL, CONTRACTOR, AND GENERAL ACCOUNTANT AND AUDITOR. 32, BUCKLERSBURY, LONDON, E.C.

CONTRACTOR for the SUPPLY of RAILWAY MATERIALS of every description. Estimates prepared. Agencies undertaken. ACCOUNTANTSHIP BUSINESS of all kinds performed under contract, whereby a considerable saving on the usual cost may be effected.

MESSRS. A. J. HUTCHINGS AND CO.'S PATENT IMPROVED WIRE ROPE. SOLE MAKERS TO THE LORDS OF THE ADMIRALTY, THE FRENCH AND TURKISH GOVERNMENTS, And the principal Colliery Proprietors throughout the kingdom. MANUFACTORY, MILL WALL, POPLAR, LONDON.

ROUND and FLAT ROPES of every description, suitable for mining operations or other purposes, GALVANISED or UNGALVANISED, MANUFACTURED upon the newest and most improved machinery, ensuring greater pliability, durability, and strength; and is admitted by the principal coal proprietors to be far superior to any other kind of wire rope. The superiority of these ropes over hempen ones, in point of strength, lightness, durability, and cost, is admitted by all who have tried them. GUIDE ROPES, SIGNAL CORD, LIGHTNING CONDUCTORS, &c.

MR. T. P. THOMAS, MINING AUCTIONEER, 2, CROWN COURT, THREADNEEDLE STREET, LONDON.

MR. JOHN R. PIKE, MINING AND SHAREBROKER, 3, PINNER'S COURT, OLD BROAD STREET, LONDON.

WILLIAM MARLBOROUGH, MINING AGENT, (For many years with Mr. T. P. Thomas), 57, OLD BROAD STREET, LONDON.

MR. WILLIAM MOORE, STOCK AND SHAREDEALER, 11, HERCULES CHAMBERS, OLD BROAD STREET. N.B. Business transacted in every description of stock and shares.

MR. R. LINTHORNE, ENGLISH AND FOREIGN MINING AGENT, 3, ADAM'S COURT, OLD BROAD STREET, LONDON. BUSINESS TRANSACTED in all ENGLISH and FOREIGN MINES, and other SECURITIES, on the usual terms of commission. Information afforded in respect to Dividend-paying and Progressive Mines.

WEST END MINE AND QUARRY OFFICES, 5, WATERLOO PLACE, PALL MALL.

MESSRS. BRUNTON AND CO., ENGINEERS AND MINERAL SURVEYORS, undertake the MANAGEMENT and WORKING OF MINES, QUARRIES, &c., and CONDUCT the LONDON AGENCY of all MINERAL PROPERTIES in their offices with system, economy, and regularity.

Messrs. BRUNTON and Co. beg to inform proprietors of mines, &c., that the business of these properties is carried on in their office upon the following principles, viz.:—

Accounts systematically and closely made up.
Statements in detail, and clear summaries of finance and expenditure.
Entire and impartial openness of books, reports, and documents, to all shareholders, for perusal or extract.
Immediate communication of any important occurrence to the shareholders.
MINERAL PROPERTIES SURVEYED, and ESTIMATES OF MACHINERY, PLANT, and COSTS OF WORKING FURNISHED.

MR. WILLIAM BIRDSEY, of No. 4, ST. MICHAEL'S ALLEY, CORNHILL, having had 30 years' experience as a MINING BROKER, can with the greatest confidence recommend from ten to fifteen mines (both dividend and progressive), which he considers during the PRESENT YEAR will well repay the outlay. The depression which has existed during the last eight months is now happily over, and any purchases to be made, the sooner done the better for profitable results. Mr. BIRDSEY will be happy to give every information, on application being made to the above address.

MR. H. HUXHAM, COLLIERY VIEWER AND MINING ENGINEER, UNDERTAKES the SURVEYING, VALUING, or AGENCY of MINERAL PROPERTIES, the WINNING, WORKING, or VIEWING of COLLIERIES, &c., on moderate terms; and begs to assure those who may favour him with their commands that all business entrusted to his charge shall receive prompt attention, and be executed with the utmost fidelity and care. References and testimonials of the highest character.

Mr. H. HUXHAM has room for TWO ADDITIONAL ARTICLED PUPILS, who would have an excellent opportunity of attaining a thorough knowledge of practical and theoretical mining engineering.—Cwm Rhondda, Pont-y-pridd.

GOLD MINING COMPANIES.—SHAREHOLDERS in the different CALIFORNIAN and AUSTRALIAN GOLD MINING COMPANIES are requested to CALL on Mr. F. SQUIRE, 74, King William-street, City, that he may submit to them a plan by which the shares in such companies, which are now valueless, will be again marketable. 74, King William-street, City, Dec. 24, 1857.

APARTMENTS IN LONDON.—A GENTLEMAN about to reside in London can be FURNISHED with a HOME, where the family is small, and no lodgers are kept. To a young gentleman from the country, about to enter into a situation, commercial or professional, great advantages could be secured. Charges very moderate.—Apply by letter (post paid) in the first instance, addressed "R. F.," *Mining Journal* office, 26, Fleet-street, London.

PARTNER WANTED, to JOIN the ADVERTISER in a going COLLIERY and IRONWORK.—Apply, with real name and address, to "P. R.," *Mining Journal* office, 26, Fleet-street, London.

TO MINE OWNERS.—A COLLIERY MANAGER, of extensive experience in both coal and ironstone mines, is NOW OPEN to an ENGAGEMENT. Can survey and map with facility, and produce the highest character and references.—Address, "S. E.," Mrs. Adams, stationer, Tunstall, Staffordshire.

TO COAL AND IRONSTONE MASTERS.—WANTED, by the ADVERTISER, a SITUATION as RESIDENT VIEWER and COLLIERY MANAGER. References and testimonials of the highest character can be given.—Address, "E. W.," *Star of Gwent* office, Cardiff.

TO COLLIERY AND MINING PROPRIETORS.—WANTED, a SITUATION as SURVEYOR, DIALLER, CAPTAIN'S ASSISTANT, or STOREKEEPER, by a YOUNG GENTLEMEN, of seven years' practice. No objection to joining a party for any foreign works.—Address, "R. C.," *Mining Journal* office, 26, Fleet-street, London.

THE WARRINGTON GASLIGHT AND COKE COMPANY.—MANAGER WANTED.—The directors are prepared to APPOINT a MANAGER, who must combine a practical knowledge of and experience in all the details connected with the making and supply of gas, and book-keeping relating thereto. The salary will be 150*l.* per annum. Satisfactory security will be required.—Applications in writing, under seal, with testimonials, must be addressed to the directors on or before the 14th January, 1858, under cover to Mr. JAMES BARRATT, solicitor, Warrington. Warrington, December 18, 1857.

TO IRONMASTERS.—The ADVERTISER has been MANAGING FORGE and MILLS for the last 20 years, and will shortly be OPEN to a FRESH ENGAGEMENT. Unexceptionable references.—Address, W. B. POPKIN, chemist, Maesteg, Bridgend, Glamorganshire.

TO MINE AGENTS.—WANTED, an UNDERGROUND AGENT for TREVOOLE MINE, in the parish of Crowan.—Testimonials as to character and ability to be sent to the purser, Mr. WILLIAM HUTHNANCE, Roseware, Hayle, on or before January 14th, 1858.

LAND OR MINE AGENT AND SURVEYOR.—A GENTLEMAN who has ten years' experience as MANAGING LAND and MINE AGENT and SURVEYOR, and can give first class references, is desirous of making a new arrangement.—Address, "H.," Messrs. Pottle and Son, 14, Royal Exchange, London.

ENGINES AND WINDING GEAR ON HIRE, with OPTION of PURCHASE, from 4 to 25-horse power.—T. CRESSWELL, 92, Blackfriars-road.

WANTED, a GOOD SECOND-HAND PUMPING ENGINE. 36 to 45 in. cylinder.—Apply to W. H. M. BLEWS, Esq., Birmingham.

TO BE SOLD, CHEAP, ONE 30 in. PUMPING ENGINE and BOILER, complete, in good condition (near Liskeard); ONE 36 in. ROTARY ENGINE, with FLY-WHEEL and ONE BOILER (near Plymouth).—For particulars, apply to Mr. HY. WILLS, 17¼, George-street, Plymouth.

LEAD FOR EXPORTATION.—PIG-LEAD (hard and soft) SOLD at LOW RATES. The BEST PRICE given for LEAD ASHES, &c., and OLD LEAD.—ROUPELL and Co., Southwark Lead Works, Gravel-lane, London.

NICKEL ORES.—THE GAP MINING COMPANY OF LANCASTER, county Pennsylvania, are now ready to CONTRACT for the SALE of from 10,000 to 20,000 tons of NICKEL ORES, in lots to suit purchasers.—Address, F. S. HOECKLEY, Secretary Gap Mining Company, 70, South Third-street, Philadelphia, Pennsylvania, U.S.

NICKEL AND COBALT REFINING, AND GERMAN SILVER WORKS, 16, OOZELL STREET NORTH, BIRMINGHAM.

STEPHEN BARKER begs to inform the Trade that he has the following articles for sale:—

REFINED METALLIC NICKEL.	OXIDE OF COBALT.	[WIRE, &c.
REFINED METALLIC BISMUTH.	GERMAN SILVER—IN INGOTS, SHEET,	

NICKEL AND COBALT ORES PURCHASED.

THE MIDLAND IRON COMPANY, ROTHERHAM, YORKSHIRE, MANUFACTURERS OF RAILWAY TYRES AND AXLES FOR LOCOMOTIVE ENGINES, CARRIAGE AND WAGON WHEELS. From the tests to which this iron has been submitted by engineers and railway companies during several years, its superior quality has been generally acknowledged, and can be unhesitatingly affirmed.

EAST WHEAL RUSSELL.	EAST ALFRED.
ALFRED CONSOLS.	YARNER.

SPECIAL REPORTS on the above MINES, by eminent practical authorities, will appear in Mr. MURCHISON'S REVIEW, to be published on the 16th inst., price One Shilling, at 117, Bishopsgate-street Within, London.

PHOTOGRAPHS FROM MANUFACTURING DISTRICTS.—No. XI.

CUTLERY MANUFACTURE.—The cutlery trade of the town and neighbourhood of Sheffield has become a great historical and political fact. It will have been observed that the mines in that part of the country could not have raised it to the distinction it has enjoyed for more than 200 years: its beds of coal and its abundant water supply have been great advantages, but its becoming the seat of cutlery manufacture is attributable to other circumstances. The rude spears and arrow heads made by certain tribes of ancient Britons have a poor relationship with the splendid productions of the famous makers of knives, razors, scissors, &c. The revival of learning in the days of Erasmus was followed by that great reformation which, though it principally professed to restore the purity of the Christian faith, it at the same time proved the fact that liberal institutions could only exist under the pure principles and divine rules found in the New Testament, which was then put into the hands of the people in a language they were able to read. The operation of these events was attended with a convulsion which shook the continent of Europe, and gave a complexion to Britain which has been retained and improved. In the year 1570 persecutions and cruelties practised in the Netherlands drove a great number of artizans to England, who were cordially received by Queen Elizabeth. The Earl of Shrewsbury, then her chamberlain, was directed to distribute these emigrants, and those who were acquainted with cutlery manufacture he placed on his own estate at Sheffield; to this circumstance must be ascribed the origin of fine cutlery manufacture in England. Probably the Duke of Alva never made a greater mistake than when he attempted to force the violent and bigoted Government of the King of Spain upon the people of the Netherlands; that tyranny gave Spain 50 years of war, and destroyed her reputation, but was the means of furnishing us with a new manufacturing interest, which this Photograph must describe. It may be said, on the authority of Chaucer, that knives were made in the town of Sheffield in the days of Edward III., but of what kind? and what were the manufacturers? half farmer and the other part cutler, neglecting one business while they attended to the other, so that the manufacture of cutlery retrograded previous to the year 1570: after that the body called the Cutlers Company was formed, which possesses charters granted by the Earl of Shrewsbury, James I., and George III.

By an article in the Charter of Incorporation it was arranged that the cutlery manufactures of Sheffield should be "steel to the edge." Goods made in the early period of that charter were iron, with steel welded on the surface: these were called "lined blades," and very clumsy, shapeless articles they were in comparison with those of modern times. The manufacturers travelled themselves in search of orders; and such were the dangers, and the length of time consequent on a visit to the metropolis, that it was said the valorous individual who performed such a task was looked upon as a sort of miraculous personage, but was accused of great imprudence if he neglected to make his will previous to his undertaking a journey to London: 30 years ago I personally knew two respectable manufacturers, one in the spring knife trade, the other in the table knife business. The former had a London trade, and was accustomed to visit the City something like once in two or three years. The latter submitted to the temptation, and resolved to go in company with his friend on a business visit to the metropolis; the preparations were gone through with far greater anxiety than is now manifested by persons about to visit the antipodes, and off they started on their wonderous pilgrimage. When they had reached the great city, the usual enquiry of "What will you take for breakfast, gentlemen?" drew from the careful producer of knives and forks the reply "Bread and milk;" and, as he witnessed his friend regale himself on the luxuries of fowl and bread and butter, with tea and coffee, he privately indulged in the speculation of how he would have to "fork out" for such delicacies, but what was his astonishment to find that "bread and milk" in London was breakfast, and charged the same as fowl, bread and butter, with their customary accompaniments. But these were only the stories of their early days, illustrative of bygone times, and the simple habits of adventures in the cutlery trade. A new order of things followed, and men of far superior talent presented themselves. Amongst these must be mentioned the late Mr. EBENEZER RHODES. There are some men whose history is never written, and whose lives are passed in producing effects, which posterity enjoys without thinking of the cause which gave them existence; the praises of a learned few may seem an equivalent, and if such men left behind them no dependents would be all that could be required. But when a man has expended his time in literature, and has not gained so much by his ordinary business as will be equal to the wants of his children, left to the mercies of a pitiless world, we then are induced to look on monuments and statuary to the dead, acknowledged by a more fortunate progeny, as the baubles of circumstances which may amuse, without a morsel of profit.

Ebenezer Rhodes was one of the earliest individuals distinguished in the list of manufacturers of fine cutlery, his place was in the Wicker; his skill was of the most unquestionable character, and he was the author of several works of local celebrity. His "Peak Scenery," a description of the wonders of a portion of Derbyshire, was distinguished by considerable research and great diligence in the collection of valuable and scientific information; however, he died, and left a portion of his family dependent on a small property (house and warehouse), which was in part destroyed by an accident, against which there was no insurance. For many years one of his family remained in the neighbourhood of Sheffield, struggling with a small school for a subsistence. How hard the lot of those whose protectors have ceased to employ their energies on their behalf, whose education produces an independence unwisely construed into pride; and how possible it is for humane hearts, engulphed in business, to forget the circumstances of those, the remembrance of whose existence has almost been obliterated by the closed grave of their honoured predecessor.

Though there are a great number of names associated with the development of skill in cutlery manufacture, it would possibly be unwise to mention those whose trade is comparatively unknown; but everybody has heard of the firm of JOSEPH RODGERS and SONS: no house in the town of Sheffield has had such illustrious visitors as that just mentioned. The pride of trade is there cultivated; the workmen drink deep into the spirit of the principals, and it would almost seem as if honour was the main spring of action in all the articles made in the name of the celebrated Joseph Rodgers and Sons. It is an indisputable fact, that whatever comes from that house has imparted to it the highest finish it is capable of receiving; but it must in justice be observed, that for many years some persons of the same name have put their own mark on cutlery which, in some markets, may have been received as the productions of the famous cutlery firm; but as Norfolk-street, Sheffield, is frequently impressed on the articles which are genuine productions of Joseph Rodgers and Sons, the purchaser may thus discriminate between the different articles which may have a corresponding name. The workmanship of the cutlery made by the celebrated house is soon observed; it appears in the accuracy of the joints and fittings of scales or handles; every part of the article where the eye can reach displays a finish and brightness which is not regularly seen in cutlery manufacture of an inferior class. These features are not the absolute essentials of a good article, but very few common goods have any corresponding evidences of superior quality; inferior materials, and bad workmanship, will be observed by persons comparatively unacquainted with the trade.

The premises occupied by the firm of Messrs. Rodgers are very extensive, and have every adaptation to the purposes of the cutlery business. Forging, grinding, and hafting, buffing and sharpening, are all carried on with completeness and uniqueness. It is very unnecessary to remark upon the character and intelligence of the principals in this enterprise, or the system and regularity which prevails in workshops, grinding-wheels, and warehouses, the general habits of the workmen, and the sobriety and industry of the staff which supports a manufacturing establishment so well known. The position of the firm, the regularity of their work, and the good wages at the manufactory of Messrs. Joseph Rodgers and Sons, have always given them choice of workmen distinguished for their skill.

The grinding of cutlery is a very injurious business. Many articles, such as razors, are "shaped" before they are hardened; this is done on a dry stone, and the particles which fly off during the operation being inhaled by the grinder produces asthma and other diseases of the respiratory organs; in addition to which, the stooping position in which the grinder works must have a pernicious effect upon his system. Many benevolent and scientific individuals have sympathised with the suffering, short-lived Sheffield grinder, and have invented plans for the relief of his profession, but though they have been useful in many instances their adoption was never general. The cost of the proper apparatus was sometimes beyond the grinders' means, and at other times he would not take the trouble of keeping the machinery in right order; that has prevented the grinder from deriving that benefit from these inventions they were intended to bestow. There is another cause of mortality amongst the Sheffield grinders, and that is the habit of many of them to indulge in drinking for days, and taking little or no food during the time; but there has evidently been an improvement in the customs of these men of late years, and this advance in the moral scale of being will influence the life and health of a race of men whose labours are indispensable in the manufacture of fine cutlery.—JOHN BENNETT.

Original Correspondence.

SUCCESSFUL MINING—THE TRESAVEAN MINE.

SIR,—I enclose you a statistical table, prepared with great care, of the returns of the celebrated Tresavean Mine, as it affords a practical illustration of the folly of abandoning a mine because the lode may chance to be less rich in any one part than another. It is well known to miners that lodes are never continuously productive, and that mineral is found in deposits in the lodes of more or less extent, and of more or less valuable quality. It will be seen that the Tresavean Mine was abandoned by the first workers, after yielding a profit of 96,000*l.*; by the second after giving them 48,000*l.*; and then, after an outlay of 2103*l.* 6s. 5d. by the third party, in 1818, the mine became again remunerative, returning 5800*l.* in 1819, and 1440*l.* in 1820, when for seven years it entailed a loss of 6596*l.* 0s. 6d.; after which enormous returns were continuous, until the gross amount exceeded half a million sterling.

Now, here is a lesson for timid adventurers. Had the captain and his friends not had confidence in each other, this splendid property would possibly be still neglected. There can be no doubt that many mines at the present moment are in a similar position: I hope, therefore, that the publication of this valuable document may cause many to hesitate ere they consign their properties to oblivion without due consideration, and to take the advice of experienced mine captains as to the value of their properties, as they must surely be better acquainted with the merits and demerits of mines, and the strata in which they will be found valuable, than tyros and featherbed miners or professors.

The document may be depended on as correct, being derived from the best authority, and prepared with great care, involving considerable pains and expense in its preparation. GEO. HENWOOD.

AMOUNT OF ORES SOLD, AND PROFITS AND LOSS, IN TRESAVEAN MINE, UNDER THE MANAGEMENT OF CAPT. WILLIAM MARTIN, OF STITHIANS, CORNWALL.

Date.	Amount of ore sold.	Loss divided.	Profits divided.	Loss per 1-96th share.	Profits per 1-96th share.
1818 ...	£2,608 7 7 ...	£2103 6 5 ...	— ...	£21 8 2¼ ...	—
1919 ...	19,625 13 3 ...	— ...	£3,800 ...	— ...	£80 8 4
1820 ...	14,836 7 9 ...	— ...	1,440 ...	— ...	15 0 0
1821 ...	6,642 15 6 ...	1440 0 0 ...	— ...	15 0 0 ...	—
1822 ...	6,463 14 1 ...	1774 11 9 ...	— ...	18 9 8¾ ...	—
1823 ...	7,526 6 8 ...	454 5 7 ...	— ...	4 16 9 ...	—
1824 ...	7,044 5 4 ...	1641 8 8 ...	— ...	17 1 11¼ ...	—
1825 ...	11,470 17 10 ...	— ...	— ...	— ...	—
1826 ...	8,886 19 4 ...	1280 14 8 ...	— ...	13 6 10 ...	—
1827 ...	10,483 14 4 ...	— ...	— ...	— ...	—
1828 ...	17,456 5 3 ...	— ...	4,320 ...	— ...	45 0 0
1829 ...	25,813 18 3 ...	— ...	10,336 ...	— ...	107 13 4
1830 ...	40,859 5 11 ...	— ...	16,800 ...	— ...	175 0 0
1831 ...	57,446 17 0 ...	— ...	28,520 ...	— ...	297 1 8
1832 ...	74,341 15 0 ...	— ...	34,880 ...	— ...	405 0 0
1833 ...	104,340 9 4 ...	— ...	60,480 ...	— ...	630 0 0
1834 ...	90,132 13 6 ...	— ...	47,040 ...	— ...	490 0 0
1835 ...	76,354 0 8 ...	— ...	29,760 ...	— ...	310 0 0
1836 ...	93,428 8 9 ...	— ...	48,000 ...	— ...	500 0 0
1837 ...	79,794 18 3 ...	— ...	32,640 ...	— ...	340 0 0
	£754,559 14 0 ...	£8704 6 11 ...	£324,016 ...	£90 13 5¼ ...	£3375 3 4
	In purser's hand ...		3,945 ...	Deduct loss ...	90 13 5¼
	Total ...		£327,961 ...		£3284 9 10¾
1838	...		37,440 ...		390 0 0
1839	...		32,640 ...		340 0 0
1840	...		18,720 ...		195 0 0
1841	...		14,880 ...		155 0 0
1842	...		12,960 ...		135 0 0
1843	...		8,880 ...		92 10 0
1844	...		3,360 ...		35 0 0
1845	...		768 ...		8 0 0
	Total ...		£453,654 ...		£4634 19 10¾
	Profits of former workings ...		144,000		
	Total profits divided ...		£597,654		

A FEW REMARKS ON GEOLOGY.—No. I.

Theory is the eye that sees and guides—Practice the hand that carries out and realises. But there are some branches of science in which the range of our vision is so limited and clouded, that the eye can see only a few objects distinctly and clearly, and where it would require the persevering efforts of the hand first to remove portions of the misty curtain before the objects at a distance could become so clear and distinct that all the spectators would agree as to their shape and nature. Geology is such a science; and it appears that the evidences of carefully observed facts are as yet either too few in number, or that hitherto too little attention has been paid to them by men best able to apply the eye of theory; for most of the doctrines and rules of that science could indeed not as yet be called well defined, clear, and reliable.

Theories and hypotheses are often productive of benefit, and are, indeed, necessary in science; for they form, as it were, the framework for a convenient arrangement of observed facts, which otherwise would perhaps be totally unconnected amongst themselves: but theories and hypotheses have very frequently to undergo considerable reform, and are often subject to total revolutions, brought on by the accumulating evidences of fresh facts, such as were not calculated upon when the theory was shaped—when, on the other hand, facts, carefully observed and conscientiously reported, are unchangeable, ever retaining their value; and in many sciences we are, even at the present day, still enjoying the benefit of practical observations and sound reasoning made and applied centuries ago. Some warning examples, however, of observers in past ages, who, though considered very learned by their contemporaries, are now known as mere dreamers, would appear to suggest to all, and especially to geologists, the advisability of their first very carefully ascertaining the soundness of the theories to which they adhere—of ascertaining whether those theories and hypotheses are fully borne out and proved as correct by the combined evidences of carefully observed facts, or whether they are unable and inadequate for a quite satisfactory explanation of such facts; and in no case should they forget that theories and hypotheses are only the scaffolding for the edifice of Science, always liable to internal and external changes, or even to be pulled down and altogether reconstructed, whenever—owing to a deficient arrangement in its construction—it should be found to interfere with and impede the progress of the edifice.

In the science of geology now—such as it is at present—it would indeed appear as if a great deal too much labour had been wasted by being directed towards the construction and embellishment of a prodigious scaffolding, and as if the progress of the solid and lasting portion of the work had been retarded in proportion. We indeed do notice within the scaffolding a few graceful pillars, constructed of the imperishable material of practical observation; with respect, for example, to a large portion of the fossiliferous strata, that science must indeed be considered as a most trustworthy and reliable guide. But a few practical men are now endeavouring to remove a portion of the scaffolding, in order to enable them to erect a main portion of the building on a strong foundation; and the bad proportions of the whole would appear to augur that they will be joined in the course of time by a large number of their well-intentioned fellow-labourers, and be successful in the end. Hence the alarm of those who, enjoying a pleasant giddiness on the very top of the mighty scaffolding, seem to be under the impression that the scaffolding is better than the building, and that it is more perfect, because higher, is well founded.

The wisest and safest course in geological investigation evidently is that which closely keeps more to facts than theories, and which makes the least possible use of the colouring glass of the latter when observing the former; and as the result even of practical observations is always a compound, in which the properties of the object investigated are intimately alloyed with the individual opinions of the observer—the whole being more or less true and correct, according to whether there exists in the compound a larger proportion of the former or of the latter—it is almost essential for the attainment of the highest possible degree of truth that an observer in geology, as well as any other science, should, when making his investigations, step with his mind almost beyond the boundary lines of his individuality, so that his mind, unfettered and self-denying, could freely mingle with all that is to be investigated, in order that, when it returns again to the inevitable channel of individual existence, there would then predominate in it the impressions of cosmical truths, and powerfully tend to suppress and counteract the influence of those individual and prejudicial opinions that always have a strong tendency to lead to vague and unclear dreams, rather than to reveal bright, clear truth. JULIUS.

CAST-STEEL PATENTERS.

SIR,—The extract from my father's manuscript, in your Journal of Dec. 12, confirmatory of my recollections of the finers' metal experiments at Darkhill, is, I believe, with the exception of some words on which I could lay my finger, in the main correct, for it refers to a fact which I doubt if any one surviving remembers so well as myself.

When it was found that the smelting-refining operation could not be profitably balanced, it was attempted to make the outlay recoverable by turning the produce to foundry iron. Up to that date grey iron had never been successfully made with pit-coal in Dean Forest. The repeated failures had been attributed to the coal used—the high delf, or thick coal, a soft coke resulting from it, bearing little burden, and quickly destroyed by the blast. Another particular feature was, that the white iron resulting from these materials had many of the properties of grey iron, and was easily cut with the chisel. That the failure to make grey iron was properly assigned to the coal, was pretty well proved when the low delf, or hard coal, came to be applied at the Cinderford Works with cold-blast, and at the Parkend Works with hot-blast, since which these works have continued to produce good grey iron, without difficulty, from the Dean Forest refractory calcareous ores, in mixture with the less limy ores of the eastern side of that cabinet coal basin.

It was the soft coal which was used at the Darkhill experiments. The burden of the cupola being altered for grey iron, it *appeared* to run from the tapping hole, breaking and playing on the surface like fine foundry iron; but when cold it proved to be the product described in the extract as capable of being "in many instances mistaken for grey iron." So peculiar was the appearance, that I can remember my father (who had a large share of the sanguine element) and other experienced persons present being again and again deceived, and convinced that the cast was at length what was desired. In the end, the intruder was easily recognised, by setting too speedily; and though with the kind, full surface of foundry iron, it set with a round end before reaching the bottom of the finers' metal box, which was of the ordinary size and description, with two troughs, and therefore not capable of holding "many tons of cast-steel at a single cast." It was a truly singular product.

It not being found possible by any management of the burden to deoxidise and carbonise the materials sufficiently to bring down grey iron, it is easy to judge how very much that object would have been promoted by driving the blast *up through the iron* in the hearth. The iron had not carbon enough; it would have been vastly improved by blowing through it for twelve hours, between cast and cast.

I am glad to hear that there are valuable ideas of my father's eminently practical mind yet unpublished. It appears somewhat singular that in the opening of his life, when filled with prospects of honour and emolument in the new field of science he was making his own, that he should have kept back from the world his most important results for posthumous publication, and given to the *Philosophical Magazine* only some insignificant odds and ends; but his views will be read with eagerness by all sound devotees of metallurgical progress. "Better late than never." I trust, however, the editing will not be performed in the spirit of this extract, Nov. 28, respecting the Darkhill cast-steel:—"I have the record of my father's researches on the subject, in his own handwriting, and the blast he employed was about 4 lbs. pillar." It would be much at variance with my father's known character to impose upon the public ideas to which he made no claim.

I omitted to mention in my last, that Mr. Robinson also explained to me the accident which prevented the full length of the cast-steel rail being realised, occasioned by the low temperature at which it was found necessary to pass the steel through the rolls. This circumstance completely identifies it with the rail claimed by your correspondent.

Jan. 6. DAVID MUSHET.

MANUFACTURE OF STEEL.

SIR,—I have forwarded to your office a box of cast-steel from British coke pig-iron of various kinds. There is a specimen of cast-steel boiler-plate from Ebbw Vale foundry pig-iron, consisting of two strips cold-rivetted together, with rivets of the same steel. There are also two small twisted bars of cast-steel from Tow Law pig-iron, which were formed by twisting an inch square bar till the thread formed by the edges were close together; the twisted bar was then drawn to ¾ of an inch square, and again similarly twisted in the same direction. It was then again drawn square to its present size, and twisted a third time, to form the two small bars now sent. There is an octagon bar of semi-steel, made from Tow Law pig, and about 5 feet in length. I hope this bar may be tried at Woolwich. For an end pull, I will guarantee it to tear asunder a bar of best Lowmoor iron of double its tranverse sectional area. The other specimens are arranged in separate compartments, and each compartment is labelled. There is not amongst all the samples a single one possessed of the peculiar excellency of cast-steel manufactured from the best marks of Swede iron; but whilst they none of them attain to the extraordinary degree of "body" and "temper" peculiar to such cast-steel, they possess, nevertheless, a far greater degree of toughness, whether in the cold or in the heated state; and prepared as they are from raw materials, costing about 80*s.* per ton, they certainly deserve the recommendation of cheapness, whilst in quality they are in every respect equal, and in many respects superior, to the average run of cast-steel now in the market.

As boiler-plate similar to the specimen shown can be produced for 7*l.* or 8*l.* per ton, under Bessemer's process and mine conjointly, it would really seem that the matter is worthy of some degree of attention. Marine boilers, at half their present weight, would possess double their present power of resistance; and from the rapidity with which cast-steel transmits the heat, the consumption of fuel would be diminished from 25 to 50 per cent.; a matter of some importance to the Government and to the nation at large. A cannon-ball, fired point-blank against a plate of this metal, three-fourths of an inch thick, would splinter like a lump of ice; and the impact of a handful of dried peas would probably produce upon the plate itself as much impression as the cannon-ball.

Coleford, Jan. 6. ROBERT MUSHET.

THE IRON QUESTION.

SIR,—I am certainly not likely to be dissatisfied by any information as to the peculiarities of my processes, but it would be difficult to show that they cannot succeed, seeing that they have already proved completely successful in producing good steel, and steel iron from coke pig-iron of average quality.

By Mr. Bessemer's process alone, neither iron nor steel free from red-shortness has yet been produced, nor in the nature of things can it be produced, however pure the pig-iron may be which is thus operated upon.

Martien's process is equally incapable of affording sound tough iron or steel, and for the same reason—the formation of an alloy of oxide of iron with the metal, which the air-purifying process necessarily entails.

In my process there is in reality nothing whatever analogous to Mr. Heath's. In Mr. Heath's process it was found by careful analysis that no manganese was alloyed with the steel, and the steel itself had imbibed its proper dose of carbon before the mixture of oxide of manganese and carbonaceous matter was presented to it. But my process depends solely upon an alloy of iron, carbon, and manganese being actually effected with the metal.

Malleable iron cannot, I believe, be deprived of all its carbon without at the same time introducing oxygen into the mass, so that an alloy of oxide with the metal takes place. Thus fire-bars become decarbonised by long use, and are then in the state of burnt iron, and as neither the puddling furnace nor the balling furnace can restore the amount of carbon requisite to constitute malleable iron, nor remove the oxide of iron alloyed with them, these burnt bars are avoided by manufacturers, as unfit for the purposes to which ordinary scrap iron is applied.

By the air-purifying process the whole of the carbon may be expelled from cast-iron, and the product becomes from that deprivation crystalline and only semi-malleable. It has also become alloyed with oxide of iron, and is therefore red-short. Under these circumstances, the restoration of a sufficient portion of carbon to constitute with the purified mass either iron or steel does not restore the malleability of the metal, because the oxide of iron still remains alloyed with the metal. Carbon can only decompose the oxide of iron at a cementing heat, and is, therefore, powerless at a much higher temperature, and in every instance the operation of cementation requires a space of time incompatible with the air-purifying process. It is requisite, therefore, to seek out some other substance capable of instantaneously decomposing the oxide of iron at an intense temperature. Manganese alone, not "carburet of manganese," represented on paper by MnC., but only known by its symbol, is, I believe, capable of effecting this. I adopted this theory many years ago, and I never saw it falsified by practical results.

In your comments you admit that it is perfectly feasible, but then strangely enough go on to observe that I cannot spell with the chemical alphabet, and yet this perfectly feasible plan is the only piece of chemistry I have advanced during this discussion. That it is theoretically sound chemistry I believe all the chemical talent in Europe could not disprove, and that its soundness is invariably borne out by practical results is a fact I have seen confirmed in hundreds of instances. I have nowhere stated that my process was calculated to purify the iron from sulphur and phosphorus; on the contrary, I have in another place given an analysis to show that a considera-

able proportion of both remained in the cast-steel produced from air-purified cast-iron by my process. You tell us that an alloy of ·0001 of sulphur with bar-iron invariably makes it red-short. Now, I believe, the tin-plate bars in your office will be found to contain probably ·2500 of sulpher, and the tough cast-steel I had analysed contained ·2340 per cent.

Thus you will see that received metallurgical ideas are not always well established by facts. What does it signify to the manufacturer of tinplates that his blooms contain one quarter of a per cent. of sulphur, provided that they roll readily and without waste into the finest description of tin-plates; or what does the tinman or his customer care for this analytical fact? I cannot give you, or your readers, the analyses of the various coke pig-irons upon which I have operated, but unquestionably they all contained sulphur and phosphorus in various proportions. How far they were deprived of these substances by the subsequent processes I cannot even conjecture. The analysis by Mr. Henry is the only one that I have ever had of my steel, though *Prof.* Noad has, I believe, analysed numerous samples for the Ebbw Vale Iron Company, and can, perhaps, give to the public the information which was never vouchsafed to the inventor.

Be that as it may, there is the steel actually produced, and it can be produced *sine limite*. As to the samples being mostly from Acadian and Indian pig-iron, this is an error, or the numerous unmarked specimens are from deoxidised iron ores. Moreover, the samples from the Indian and Areadian pig-iron are in some respects essentially superior to any produced by Mr. Bessemer's process, for they are perfectly sound, and perfectly free from red-shortness at any temperature.

That specimens of coke-iron steel may not be wanting, to compare with these other samples, I purpose sending a few for each kind of iron operated upon.

I think, again, too confident an opinion was given as to the cause of the cellular structure of ingots of iron or steel. Granting that the cells are caused by the evolution of gas inside the mass of metal, how can this gas be carbonic oxide unless some oxide of iron, as well as carbon, has been present in the iron? Besides, the cellularity increases exactly in proportion to the privation of carbon, and in proportion to the oxydation of the iron.

The cells never occur, except under circumstances when we have reason to believe that oxide of iron is present in the mass. As to the accurate explanation of the cellular phenomena we know nothing, nor is it probable that the matter will ever be cleared up. Until some better explanation can be offered I shall adopt my own of the matter, which is—that iron free from carbon, or nearly freed from it, and in the fluid state, is capable of being vaporised, and produces ebullition in the fluid mass, just as the generation of steam below the surface causes water to boil; but the melted iron being much more dense than water, the iron vapour cannot ascend so rapidly as the bubbles of steam, and as the metal quickly sets, innumerable bubbles of this iron vapour are arrested and inclosed in the consolidating mass, and are then quickly condensed upon the surface of the cavaties, giving to the inside of the cells a peculiar silvery lustre which no artificial polishing can confer. When these cavities are so near the edges or sides of the ingots as to communicate with the air they are found discoloured, and exhibiting all the oxygen colours produced in succession by tempering steel. When the metal contains much carbon the iron appears to be vaporised sparingly, and the cells are found of a small size and of a compressed spherical configuration; but when the iron is nearly free from carbon it is vaporised rapidly, and the cells are therefore large, irregular, and communicating with one another, and at many points with the exterior of the ingot. With highly purified metal, the ingots are often less than half the weight of solid ingots of the same size, owing to their cellular structure.

With regard to my giving satisfactory evidence of the value and practicability of my process, I can only say that operating upon 500 lbs. of metal I have made excellent steel from mine coke pig-iron, with a waste of 25 per cent. In other words, 4 tons of pig-iron would make 3 tons of cast-steel. But 500 lbs. of cast-iron is far too small a quantity to operate upon in practice; and unless there be a sufficient mass of metal to retain the fluid state for a reasonable time, the mixture of the alloy and the pouring of the steel into moulds cannot be effected with certainty before the metal chills. I have myself no means of extending the scale of operations. From 5 to 20 tons of iron should be purified at once, and this quantity would, I have no doubt, retain its fluidity after it had been completely purified for a considerable length of time, quite long enough to admit of its being poured off into moulds, without any risk of its chilling. The Ebbw Vale Iron Company, to whom I proposed this extended scale of operations, had not even the courtesy to acknowledge the receipt of my plan and proposals, far less did they condescend to inform me whether they would or would not adopt the plan. From the day that my complete specification was filed up to this time, all information as to their intentions in respect to my patent has been studiously withheld from me by the Ebbw Vale Iron Company, and by their agents, Rixon, Son, and Anton, and every aid or help towards carrying it out has been by them as studiously kept back. What their intentions may be I cannot pretend to conjecture. Incredible as it may appear, I could not even obtain from them a few cwts. of manganesic pig metal to test my process with, after the complete specification had been filed; and after lingering on month after month, daily expecting the promised supplies, I was sooly desired to suspend all farther operations at an hour's notice. Thus, in place of being backed by influence and capital to carry out the grand inventions in the contemplation of which Mr. Darby was lost in thought, I find myself left in the lurch, and the credit of my inventions jeopardised, because the apathy of the great Ebbw Vale Iron Company naturally impresses the public with the idea that the processes, which they have never tried, are valueless.

I think the Government ought to take up and prove this invention of mine, which certainly promises to be more beneficial to the nation than "monster mortars" or "*Leviathan* launches;" and, by the way, if the monster mortar had been made of my tinplate bloom metal, it would never have burst, and had the *Leviathan* been built with plates of the same metal, it would have been thrice as strong, if only half its present weight, and the multitude of "rams," which the shareholders will ultimately find are "deer," might have been dispensed with. In conclusion, I quite agree with with "S. K." that my steel ought to be tested and spoken of only as it bears the tests to which it may be submitted. I would rather see it condemned than made the subject of a series of coloured exaggarations, like the atomic process. E. MUSHET.

Coleford, Dec. 31.

MARINE BOILER FIRE-DOORS.

SIR,—You have already recorded the success of my *Regulating Air-Doors*, for steam ship furnaces, on board the *Sir Robert Peel*, *Lady Jocelyn*, *Persenunga*, and other vessels; yet, as the question of "*how to prevent smoke and keep steam*" is still believed by many to remain unsolved, I beg the favour of your giving currency to further proofs of my attaining in that direction. In fact, with that invention the suppression of smoke is but a limited proportion of the benefits that accrue; since there is superadded a positive *increase of steam*, generally of about 2 lbs. above the average pressure, and a delightful cooling of the boiler rooms. May I, then, beg the favour of your inserting this letter in the Journal, with the following copies of extracts and letter? J. LEE STEVENS.

Screw Steamer, Princess Charlotte.—Extracts from letters dated Queenstown, Cork, Oct. 28, 1857, addressed to Mr. Thomas Summers (Messrs. Summers and Day), Northam Ironworks, Southampton:—

Capt. FOGGIN.—"Lee Stevens's doors have performed very well indeed. We have been obliged to slacken the fires, the pressure rising to 15 lbs., with 47 revolutions during the night. Our passage from Southampton was 36 hours."

Mr. RITTMEYER, Chief Engineer.—"I think it is a great improvement that you have made in the fire-hole doors. They kept quite cool."

Newcastle and London Steam Ship Offices, Irongate Wharf, London, Jan. 5, 1858.—The engineer of our screw steamer *Brigadier* reports very favourably of your Patent Regulating Air-Doors, as regards smoke prevention, ventilating the boiler-room, and keeping steam, even with an inferior coal. Giving more steam, which is equal to increased power or economy of fuel, your invention is of great importance for marine purposes; and for that and its other merits we very warmly recommend it. Upon application to us, steam ship owners or engineers may judge for themselves by inspecting the *Brigadier's* doors, when she is at Irongate Wharf, London, or London Wharf, Newcastle.—LAING AND STEPHENS.

VIRTUOUS LADY MINE.

SIR,—As some historical interest attaches to this mine (now united to another, and called "Virtuous Lady and Wheal Bedford"), any authentic particulars respecting it may prove of interest to the public. Some time since Capt. Goss, of some celebrity as the late manager of Lady Bertha Mine (and who, by-the-bye, appears to me to be a man with a head upon his shoulders), published in your widely-read Journal a letter, giving *some* account of Virtuous Lady, and of sales of copper ore made between 1825 and 1832, the produce of the mine (see Journal Oct. 17, 1856, p. 724), from which I find, taking an average supplied by Captain Goss's details, that within the said period the mine sold 903 tons of ore for 5770*l.*, which gives 6*l.* 8*s.* per ton average—a naked fact, that would be of more importance if the cost of production of this ore had been given, so as to show whether the work was then conducted at a profit; but in other respects the sales were made when money was of less value, and consequently the ores, than they are now, the price being equal to, if not above, the Cornish average. Capt. Goss states that he "could have given (from an authentic record) the sales for ten years, all raised from 15 fms. below the surface, and that the mine has been continuously raising copper ore from 1825 to the present time." He might have added, with that fluctuating success which brings so many mines to the stand-still point, unless they, from intrinsic merit, attract the attention of fresh bodies of adventurers—and thus Virtuous Lady was brought to the hammer about a year since, and the whole plant and mine purchased by (what are always considered as having earned the reputable title by such an act) "spirited individuals," and so distributed as a promising concern amongst a few capitalists, who work on and wait results, in this case evidently to reap a reward for their outlay and trouble, since the late and latest reports from the mine show that large deposits of rich ore exist in it; indeed, Captain Goss, who has no interest in the mine, concludes his letter by stating that "the late proprietor, Mr. Thorne, returned from 5000*l.* to 6000*l.* worth of copper ore in four years, and the present proprietors have only to sink a little deeper before they reach a continuance of one of those large deposits of mineral wealth of this celebrated *old* copper mine." The reader will observe the introduction of the word "old" into the last paragraph, and hence arises a question—How old is the Virtuous Lady? Is she as "old as the hills?" And who was the feminine personage who gave her that name? We shall enlighten the question a little about ago, when we mention that (as we are informed) Queen Anne was the "Virtuous Lady," the mine having been worked in her time; and although no particular celebrity attaches to the name of this Queen of England, the prefix may be regarded as a well-deserved and high compliment to her. Then, again, it is celebrated for unique and valuable specimens of ore, which Nature has moulded into all sorts of shapes, such as ladies' slippers (we have heard of glass—Cinderella, to wit—but not of mineral slippers before, and should like to see a pair of them), and other things more fantastical, as figures of animals, found in "vughs" or caverns, and, of course, "highly interesting to the curious collector." The ore also exists in "flats," or horizontal deposits, instead of in the usual form of lodes, and the working of it is, therefore, more of quarrying than mining. The main thing, however, is a course of rich ore, which the present adventurers believe they have got; and since the concern is, and can always be, worked effectively without steam-power, Virtuous Lady and Wheal Bedford offers something beyond the ordinary chances of success; but it is worthy of remark that its present condition of returning rich ore is only in accordance with the predictions of Captain Goss, and whilst that fact does credit to his judgment, it points to the strong probability of its still greater success, although these points are somewhat irrelevant to the chief object of this letter.

I, *Finch-lane, Jan.* 8. JAMES CROFTS.

SOUTH AUSTRALIAN IRON.—We have received specimens of iron ore, and iron manufactured therefrom, which seem of the very finest quality. The ore has been subjected to only one process of smelting, and that of the rudest possible kind, yet it appears sufficiently malleable and tough for all ordinary purposes.—*Adelaide Observer.*

Meetings of Mining Companies.

DRAKE WALLS MINING COMPANY.

The general meeting of shareholders was held at the offices of the company, Moorgate-street, yesterday,—Mr. W. J. DUNSFORD in the chair.

Mr. HIRAM WILLIAMS (the secretary) read the notice convening the meeting, and the minutes of the last, which were confirmed.

A statement of accounts was exhibited, from which the subjoined is condensed:—

Total receipts, including balance brought from former account		£8891	9 6
Disbursements		8593	19 9
Balance in favour of adventurers		£ 297	9 9
ASSETS—Bills receivable in hand	£918 8 5		
Sundry accounts due to company	756 2 6		
Cash at bankers	327 6 4 =	£1931	17 3
LIABILITIES—Due for supplies	1526 0 0		
Sundries	108 1 6 =	1634	7 6
Balance in favour of mine		£ 297	9 9

The CHAIRMAN then read the following report:—

Jan. 5.—Since last meeting we have completed the heavy and expensive timber work at Betteley's shaft, and the old works adjoining, and we are pleased to say the same is of great strength and durability, and may be considered a permanent and substantial shaft in every respect. The necessary preparations of cutting ground, taking up water, &c., preparatory to sinking has been made, and 7 feet 6 in. sunk. Below the 90 the ground at the shaft is of a favourable character, but the water being very strong makes the progress rather slow; the branches here are producing some good stones of tin, intermixed with a large quantity of quarts and wolfram. The branches in the 90, east of Betteley's, have considerably improved during the past fortnight, and are at present producing good work; we purpose to push on this level, and communicate the same with the 92, west of Matthews's, which will afford us a good supply of tinstuff for the drawing-machine at Betteley's shaft. We have six men employed in stoping below the 70, west of Betteley's shaft, who are steadily progressing. In the drainage of the tin ground at machine shaft this stope has produced but a small quantity of tin thus far. We are now about to develope a more productive run of tin ground a few fathoms west of our present operations.—Matthews's Shaft: The 90, west of Matthews's, is being driven by six men, in order to communicate with the 90, east of Betteley's, with as little delay as possible; the branches in this level continue to produce moderate work, intermixed with wolfram and quartz. The branches in the 92 east are at present producing coarse work for tin, with occasional stones of copper, very similar to the level above; about this point there remains about 8 fathoms to drive to come under the rich branch passed through in driving the 90. We have four stopes working by 24 men in the back of this level in moderately productive tin ground. In the 80, east of Matthews's, the branches are of a more productive character, and the strata very congenial for mineral, with occasional small patches of granite intermixed with the branches. We have two stopes in the back of this level, which have been moderately productive, but at the present time they are in a disordered state, in consequence of some floors of quartz and mundic; we regard this as a temporary change only, which is frequent in this mine. In the 70 east the branches are assuming a more favourable appearance than for a long period, and are now producing good work. We have three stopes working in the back of this level in moderately productive tin ground, and as we open out the eastern stopes the prospects are more favourable. The 60 being some distance in advance of the stopes is suspended for a short time, although the branches are moderately productive; we have placed the men to stope in the back of this level, but shall resume the driving as circumstances may require. The stopes in the 60, on south branches, are producing some good work, quite equal to our anticipations; we have every confidence that at this point we have a profitably productive piece of reserve ground, which will be available for a long period, and likely to give good profits. The 70 cross-cut north, at Matthews's, is extended 36 fathoms 3 feet on the cross course. It is satisfactory to state that during the past fortnight we have intersected two branches of rich copper ore, together with some small stones of rich grey copper ore, taken out of the cross-course near the present end, specimens of which will be laid before you. We are now pushing on north, by three men and three boys, at 6*l.* 10*s.* per fathom, which includes tramming and all costs; from previous calculations there remains about 30 fathoms to intersect the north lode near the granite; assuming the underlie and bearing continues agreeable to driving of the deep adit, the ground not having been proved by any former explorations, it is probable this distance may not be so great, or we may have some intermediate lode not far ahead; from the increase of water, and the intersection of the copper branches, we are expecting shortly to make some discovery. At present we are driving the deep adit, by one man and a boy, at 3*l.* 15*s.* per fathom; the lode in the end is from 4 to 5 feet wide, in a disordered state, occasioned by some cross-floors of quartz; we have no doubt but in a short time the lode will assume the favourable and encouraging appearance as hitherto. We would advise the driving of the 60 cross-cut south when circumstances will afford by better prices for our produce; and we beg to observe a general reduction of wages has been made throughout the mine, equal to 12 per cent., and due regard to economy is strictly observed in every department, and the mine being carried on in a legitimate and proper manner; although we have depressed times to contend with, the prospects are of a satisfactory character. There are 255 persons employed in and on the mine.—THOS. GREGORY, JAMES ANDREWS.

The CHAIRMAN said he need not trouble them with any lengthened remarks, as they were aware of the disastrous fall in tin, which had taken away all the profit: the reduction had been about 25*l.* per ton, which was in fact their profit; and the only matter of importance he should have to propose was that the committee be authorised to retain the tin at they discretion. They were advised, and he was of opinion that they had touched the lowest point. They had 20 tons of tin, and did not purpose to sell it at present. It was quite clear, from the reports, that the mine had never been better, and if the prices had remained the same they would not only have given dividends, but have had a large reserve. The wages had been reduced, and everthing done on the safe side. He would conclude by moving that the report and accounts be received and adopted.—Mr. HODGSON seconded the resolution.

The CHAIRMAN said the next question was as to reserving the tin; and the responsibility of so doing they did not like to take upon themselves, without the consent of the shareholders, although they were anxious to have it left to their discretion to hold it until they could get a better price.

Mr. HODGSON said he would propose that the committee should have a discretionary power; for whether for good or evil, he was satisfied they would do the best they could for the benefit of the general body of shareholders. He concluded by moving—That the committee be authorised to retain the tin at their discretion.

Mr. LITTLE seconded the resolution, which was carried unanimously.

Mr. BAYLEY said, as one of the committee residing in the district, he had a resolution to submit to them, to mark their sense of the valuable services of their agents on the mine by a pecuniary vote. An accident had happened at the main shaft, threatening a slip of the ground, which alarmed the committee, as they expected considerable expense would be incurred to secure it, and but for the energies of the agents the shaft must have collapsed, and perhaps a new shaft have to be made; in fact, he believed the shareholders, by the exertions of the agents, had saved 2000*l.* He (Mr. Bayley) would conclude by moving that 20*l.* be voted to Capt. Gregory, 10*l.* to Capt. Andrews, and 5*l.* to Mr. Parsons, of the dressing department: they had all earned it, and were well worthy of the amount.

Mr. BETTELEY seconded the resolution.

Mr. HODGSON believed no one could object to it, as he considered they were very well officered. He was obliged to Mr. Bayley for bringing the subject forward.

The CHAIRMAN having concurred, the resolution was unanimously adopted.

Messrs. Bayley, Betteley, Dunsford, Gill, and Little were appointed the committee of management, and the proceedings terminated with a vote of thanks to the Chairman.

WEST PAR CONSOLS MINING COMPANY.

The adjourned meeting of shareholders was held at the offices of the company, Bishopsgate-street, on Thursday,—Mr. S. W. DAUKES in the chair.

Mr. MURCHISON read the notice convening the meeting, and minutes of the last.

The CHAIRMAN said the adjournment was for the purpose of ascertaining what amount of the calls due they should be able to get in, and whether it would be necessary to make a call. At the last meeting Capt. Webb recommended the sinking of a shaft at a particular spot, which, as it took in part of a meadow of Major Carlyon's, the lord, and would be a detriment to his premises, there was some difficulty in obtaining it; but eventually the Major agreed to take 50*l.*, and Capt. Webb had commenced sinking the shaft. Since the last meeting they had received the cost-sheet for the month of Nov., and Capt. Webb, as he anticipated, had been enabled to pay the labour cost from the sale of tin, and had a balance to send up, thus fulfilling part of his arrangement, that he would be prepared to pay the labour cost for the following three months from the date of the meeting.

Mr. MURCHISON then read the following reports, from Capt. Webb:—

Jan. 4.—I am glad to say that the mine is looking well, but we are so situated with the engine-shaft and great cross-course interfering with the lodes, it will take several months before we drain the 65 east, when we are getting the tin and copper; yet, in the interval, we shall be opening out the 45 rapidly, and having a great extent of sett in that direction, if the prospects continue we shall be able to report good things by the time the shareholders are called together again. I beg to thank the committee for sanctioning and providing for the terms which we had to comply with for sinking the new shaft; it may appear at first sight objectionable paying the lord for such a space (one-third of an acre), but being so very near a respectable residence, gardens, and rich meadows, I consider Major Carlyon more liberal than many landlords would have been: we propose calling this shaft Daukes's; it will be a very important shaft for ventilation, discharging the mineral, and prosecuting the mine below the 65, when the water will be discharged from thence to surface, through the present engine-shaft, which will always be the discharge shaft from that level, but never sunk deeper, being out of position for commanding the lodes. I have no doubt when it is found desirable to have a large perpendicular shaft to the north (where there are other important lodes), for prosecuting the mine 200 or 300 fms. deep, the major will be liberal enough to grant liberty to do so; but as the company have been so long laying out their money, I propose for the present to make use of the means we have, and return at least some of the outlay back again. I hope the shareholders will continue their patience, and I have every confidence we have a good and lasting property. We have about 2 tons of tin undressed, and the dressing-floors are in good order. Of late we have been going to much additional cost, which we had been defering previous to our improvement in the 45.—J. WEBB.

Jan. 4.—We have reached the lode in the 65, but find it underlying very fast, consequently we shall have to drive several feet before we shall get through it and ascertain its worth, we shall then drive east on its course until we reach the great cross-course; after that we shall have some few fms. to cross-cut to the lode east of the cross-course on which we are operating in the 45; this is a peculiar piece of mining, on account of the lodes being heaved a great distance out of their regular course by the cross-courses, consequently it requires a longer time before we shall be in a position to lay open the productive lode passed over in the 45. In the 45 we have passed through 45 fms. of good mineral ground, especially in the bottom of the level; we do not calculate finding it good to any great extent above this level. The lode in the present 45 east end is 5 ft. wide, but worth more for copper than for tin, altogether worth about 12*l.* per fm.; the price given for driving is 3*l.* 5*s.*; although it cannot be called a rich course of ore it has every pleasing character connected with mining. We have six men rising from the 45 towards the new shaft sinking from surface (by six men); we are putting all force possible at this shaft, and calculate to communicate from surface to the 45 in about four months; when this is effected and the lode tapped as a drain in the 65 we shall, from present prospects, get good returns of tin and copper, and in the interval we shall be getting tin and copper sales, but the quantities will depend on the productiveness of the further drivings of the 45; if it continues as at present the sales will be satisfactory, but I am not safe in promising any amount. We sold on Saturday last 276*l.* 10*s.* worth of tin, and have offered for public ticketing about 230*l.* worth of copper.—J. WEBB.

The CHAIRMAN said, in the 45 there were 45 fathoms of good mineral ground driven through. He (the Chairman) then explained from a plan, at considerable length, the present and proposed workings.

Major CARLYON said, although he was unacquainted with mining, he should be glad to facilitate their views to the utmost in his power; and when they required the ground pointed out by the Chairman he should be able to grant it, although there were certain portions of the estate in which he was restricted by his father's will from granting for mining purposes. He had had this mine examined only one month since by his own captain, totally unconnected with the company, who gave a very favourable report, and considered they had got into the Par Consols lode. But they were no depth, and they had much greater facilities than many other mines, as they were being drained by the Par Consols. He had been informed that the Par Consols intended sinking a shaft near their mines, which would give them a great deal of information, because they must cut all the lodes, in addition to the advantage of draining the mine, and having the benefit of plenty of capital, and making good profits, would go to a great expense in performing the work properly.

Mr. MURCHISON then read the statement of accounts since the meeting, Nov. 24:—

Cash in hand last meeting		£102	4 3
Calls received		356	13 0
Carriage of ore		30	0 3
Tin sale		276	10 0 = £765 13 4
Mine cost, Oct. and Nov.	£430	8	3
Major Carlyon	50	0	0
Lease for additional sett	31	10	0
Secretary and sundries, Nov. and Dec.	13	3	3
Printing and advertising	13	14	5
Freight of coals	85	0	0 = 621 15 11
Balance in favour of adventurers			£143 16 5

The CHAIRMAN congratulated the shareholders that no call was necessary, and that with all the calls paid up the mine would be about clear of debt to the end of Nov., with every prospect of the mine meeting its costs for the future. The reports were then received.

Mr. WILSON considered that proceedings ought to be taken against the shareholders in arrear of calls.

Mr. HARRISON said there were several who would not pay, merely because others had not paid; and as the mine was looking so well, every arrear ought to be got in.

Mr. WILSON then proposed that the solicitor be instructed to take proceedings against all shareholders who shall remain in arrear of any call after the 23d inst.

The resolution was seconded, and carried unanimously.

The meeting was then made special for the purpose of considering the applications of certain parties to have their shares restored, when it was unanimously agreed to restore 100 shares to Major Turner, and 190 shares in the name of Mr. J. P. Williams to Messrs. Thomas Piper and Wilson Thomas Piper, upon condition that they be registered, the whole of the calls having been paid.

A vote of thanks to the Chairman terminated the proceedings.

STRATHALBYN MINING AND SMELTING COMPANY (LIMITED).

An extraordinary general meeting of proprietors was held at the London Tavern, Bishopsgate, on Wednesday,—Mr. T. WINKWORTH in the chair.

The SECRETARY read the notice convening the meeting, and the report of the directors, from which the following is condensed:—

Your directors deem it their duty to call you thus early together, for the purpose of submitting a statement of the company's affairs, and of adopting such measures as you may think fit for providing the requisite funds for carrying on operations. The principal laid down by your present board on taking office was that the works should be vigorously prosecuted, with the view of proving the value of the lead and copper lodes, so that in the event of a successful result the capital expended might, at the earliest possible moment, become remunerative. But the energies of your directors were crippled at the onset, by the limited funds at their command. At the date of their taking office the assets were 5071*l.* 8*s.* 4*d.*, including 2191*l.* 7*s.* capital not called up, and the liabilities 4499*l.* 12*s.* 2*d.* Your directors determined on at once exercising the power of calling up the 1*s.* per share remaining due on the ordinary share capital, making the shares fully paid-up 22*s.*, and of transmitting funds to Mr. Squarey to the full extent of the company's means, after providing for the liabilities, and on Nov. 16 they accordingly sent out a credit of 500*l.* The Burra Burra Company had declined to purchase the large engine; the vigorous prosecution of the works, therefore, by means of the existing capital, was out of the question—the first duty of the manager being to pay off the existing debt. The directors had hoped to receive a reply to the despatch Oct. 10 before calling you together, that they might have had the advantage of the views of Mr. Squarey and Capt. Prisk, especially as to the amount which they estimate will be required to develope the mine. But from advices recently received from Mr. Squarey, your directors consider that immediate steps should be taken to place him in funds. The present is the financial position of the company in England, Dec. 15. Assets, 2780*l.* 16*s.* 2*d.*; liabilities, 3830*l.* 5*s.* 6*d.* Regarding the prospects of the mine itself, your directors are of opinion that the reports are encouraging, and that a sum of 6000*l.* should be immediately raised, which they propose should be secured by mortgage debentures, forming a distinct mortgage or charge upon the property, to be allotted *pro rata*, and to bear interest of 10 per cent. per annum, the principal to be repayable in five years. In the accounts of receipts and expenditure from Dec. 30 to Nov. 30 the total amount of receipts was 8191*l.* 13*s.* 8*d.*, and the expenditure, 6816*l.* 3*s.* 1*d.*: leaving balance in favour of company, 1375*l.* 10*s.* 7*d.*; but out of this amount 1200*l.* was on deposit at the Commercial Bank of London, to meet letters of credit sent out July 11 and Nov. 16, and an acceptance for 200*l.*

The CHAIRMAN said he had no idea until yesterday of occupying the present position, as since the last meeting his occupations in other matters had become rather onerous, and he felt it his duty to resign as director. As, however, it was found necessary to have a certain number of directors on the board to make their proceedings legal, and if he had resigned the present meeting could not have been held, he had consented to remain for the present. As he had abstained attending the board meetings, he should occupy the seat simply as a shareholder, but he considered the report told the whole truth exceedingly well. He had never read it until in print; however, he was of opinion the whole case was placed before the shareholders, and it was for them to decide whether the report was such as would justify them in going on; and whether the property possessed within itself those elements of success for which they had over and over again, both as shareholders and directors, given it credit for. He had received a letter from Mr. Taunton, of Liverpool, authorised by the whole of the Liverpool shareholders, and some others resident in other parts of England, that they would not consent to any other course than to wind-up the company; and it would be for them to say whether they would indorse that opinion, or the unanimous views of the directors in the report. He would now move that the report be received, and after being seconded, it would be competent for any shareholder to move an amendment that would embrace the views of the Liverpool shareholders.

A SHAREHOLDER enquired how many shares Mr. Taunton's party represented?

The CHAIRMAN replied, 13,639 out of 51,684.

Lieut. WATSON seconded the first resolution.

The CHAIRMAN having moved the second resolution—

Mr. LOCOCK WEBB said he would have preferred some other shareholder seconding the resolution; in doing so, however, his observations should be very few, and he would base them upon the records that were before the shareholders. The first consideration was whether the reports received from the mines warranted a further outlay; as, if they did, money should be raised; but, if they did not, then the sooner the Strathalbyn Company was wound up the better for the shareholders. At the last general meeting, and at the former one, the raising of money was urged, as they had not sufficient capital. It was known that more money would be necessary, and it was simply a matter of time when it should be raised. Let them read what Capt. Prisk says in his report of Aug. 9:—"We have had two men driving in the 22, south of Bassett's engine-shaft, on the course of the lode, and here we find it to be improving considerably. The lead and jack are separating from each other very fast, and I hope and believe that the time is not very far distant when they will be entirely separated, and the company have a paying mine." Thus, the reports bear out the former ones, but he could not pretend to say whether they could rely upon them; but he would draw the shareholders' attention to the fact that, upon the face of all the reports they had received from the commencement, they all confirmed the views of other parties who had inspected the mines, that they would shortly come into a piece of valuable mineral ground. If they were satisfied with these reports, and having spent nearly 60,000*l.*, would it be advisable to throw it away? As far as his experience went, there was no company in existence that had been more honestly conducted since under the present management; by present management he meant since the change in 1852. He (Mr. Webb) was arguing upon the ground whether, if they were satisfied with the reports, it would be wise to stop now, when they had machinery out to operate for both copper and lead? The directors were somewhat at sea through not having received the report from Mr. Squarey, in reply to the board's letter of Oct. 10, but there had not been time to receive it, and until they got that document they could not tell whether the 6000*l.* would be too much or too little. The great question was, however, were they satisfied with the reports, and that they ought to go on? If so, money should be provided at once. He would say one word with regard to the security. The whole of the property would be transferred in the shape of a mortgage, and the parties advancing would have a priority of claim over the land, mines, and machinery, the latter having cost about 3000*l.* He (Mr. Webb) was a large holder, and his friends were large holders, and it was not very desirable to pay more money, but they would contribute to the full amount of their shares, for if they wound up he did not think they would receive anything. He would conclude by seconding the resolution.

Capt. MACNUDO considered they had better wait to hear from Mr. Squarey. As to selling the property he had a different idea from others, as he was of opinion it would fetch a good sum from parties in Australia, as that there was a good mine no one could doubt.

Mr. FULLERTON (director) said they were compelled to call the meeting because of the bill for 500*l.* falling due this month, in addition to other debts owing, besides interest on the preference shares. The directors, therefore, considered they had no alternative but to make this report, and call the meeting.

Mr. HENRY wished to know whether the copper lode had ever been seen?

The SECRETARY replied in the negative, as the mine had not been in fork since in possession of the present company.

The CHAIRMAN said Dr. Rankine (from South Australia), who was well acquainted with the property, was present, and perhaps would favour the meeting with some account of it.

Mr. RANKINE said, being called on so suddenly he was not prepared to make any statement, but would answer any questions that might be put to him, as he knew the property from the commencement, had a local knowledge of it, and seen all the operations.

Mr. C. LOCOCK WEBB wished to know whether it was not considered entirely a copper mine when sold, and whether the copper had ever been looked for?

Dr. RANKINE replied it had not; and, in answer to further questions, said the lead lode was good, but the ores would not pay to send home, they should be smelted on the mine; he alluded to the carbonates of lead ore, as he would not recommend the galena being smelted in the colony.

Lieut. WATSON wished to know whether it was probable the property would realise 6000*l.*?—Dr. RANKINE believed it would.

Lieut. WATSON, who had resided in Adelaide for some time, was of the same opinion, and he believed there was a large number in the room who would endorse the opinion of the Liverpool shareholders to a considerable extent, but not to wind-up the company. He did not believe they would get one penny until they received Mr. Squarey's report. It was quite clear that prosecuting the lead lode did not answer, as, although, according to the assay, it yielded 40 per cent. of lead and 37 ozs. or silver, with traces of gold, it fetched extraordinary low prices, when if these re-

sults had been correct it must have been a profitable undertaking. He considered the directors should give some reason for the difference.

The SECRETARY said the first cargo of ore fetched 8*l.* 10*s.* per ton, but they had not received any cargo of that value since. The recent sales had been at 4*l.* 10*s.*, and some at 5*l.* 10*s.* per ton; and they had received a cargo containing, by assay, 25 per cent. of lead and 21 ozs. for silver, but the only offer they had received for it was 5*l.* per ton, delivered at Bristol. In the present depressed state of the metal market it would be impossible to sell it to the best advantage. Mr. Squarey had now altered his plan of operations, having ceased to raise the carbonates, and was sinking the shaft, which held out every indication that the lode would yield galena. A sample of argentiferous galena had been met with in sinking the shaft, which yielded a value by assay 26*l.* per ton.

Lieut. WATSON was of opinion that had they prosecuted the mine for copper they would have been in a very different position. He should move, as an amendment, that the further question of operations be adjourned until after the directors had received the report from Mr. Squarey.

Mr. HENRY believed they were in a position to meet the 500*l.* bill.

Mr. FULLERTON: But there is interest on the preference shares to pay, a 200*l.* bill, and other expenses, in addition to a 500*l.* bill, which the directors gave no instructions to draw.

The CHAIRMAN said they could fix a day for the adjourned meeting, and if by that time they had not received the advices, the could meet *pro forma* and adjourn again.

Mr. C. LOCOCK WEBB would be extremely glad to support the amendment, but he felt strongly that if they adjourned for six weeks the company would be placed in great peril, as before then some step might be taken which would prevent the company proceeding at all, and it would be jeopardising the company by waiting for the report. They had got an estimate sufficiently near to guide them in one of Mr. Squarey's former letters, showing they would require 450*l.* per month if they went on with the lead and copper lodes. At the present time they were confining themselves to the lead lode, and it was wise to do so, through not having more money. The necessary machinery was sent out to commence on the copper lode when they had sufficient capital, and he agreed it should be done as speedily as possible; but they must, upon the present occasion, subscribe a certain sum of money to prevent the concern going headlong to ruin. He warned them that if they wound-up it would be now in the Court of Bankruptcy, which was infinitely worse than Chancery, as in the former they got nothing, but in the latter they did get something. He was glad to hear from Capt. Macmurdo that he considered the mine valuable; and as regarded the security, if the amount was not returned the parties advancing would have the whole of the property, and the fee simple of the land.

Mr. TAYLOR suggested that they should raise 3000*l.* to meet present emergencies, and adjourn the meeting until the report had been received.

After a lengthened discussion, the amendment was withdrawn, and a resolution passed authorising the directors to raise not exceeding 6000*l.*, redeemable in two years by payment of principal and interest, and 10 per cent. bonus; but only to raise 3000*l.* of the amount without the consent of a general meeting. A resolution was also passed to withhold the payment of the interest on the preference shares, until it was ascertained to what extent the additional capital would be subscribed.

A vote of thanks to the Chairman terminated the proceedings.

COLONIAL BANK.

The fortieth half-yearly general meeting of proprietors was held at the London Tavern, Bishopsgate-street, on Wednesday,

Mr. CHARLES MARRYAT in the chair.

Mr. CALVERT (the secretary) read the notice convening the meeting, and the following report of the directors:—

The following statement of the debts and assets of the corporation on June 30, 1857, which also exhibits the amount of profit made during the half-year ending at that period, is submitted to the proprietors, in accordance with the provisions of the Charter:

DEBTS.

Circulation	£	291,575	17 6
Deposits and other liabilities		4,385,198	6 0
Paid-up capital		500,000	0 0
Profit		30,034	12 0
Total	£	2,206,808	15 6

ASSETS.

Specie	£	212,780	15 2
Due to the bank in the colonies, on bills discounted and purchased, including those past due		771,794	19 3
Due to the bank in the colonies on current accounts		8,703	16 7
Due to the bank in London on bills remitted, cash at bankers, &c..		1,197,806	4 1
Bank premises and furniture in London and the colonies		5,644	2 9
Balance of bad debts		10,078	17 8
Total	£	2,206,808	15 6

In presenting the above statement, the directors have pleasure in adding that the accounts of the half-year just ended, down to the latest dates in their possession, give promise that its return of profit will be fully equal to that of the corresponding period of 1856. They, therefore, recommend that out of the profits of the half-year ending June 30, 1857, which amount, after providing for income tax and for bad and doubtful debts, to £30,034 12 0

A dividend be made of 3 per cent., being at the rate of 6 per cent. per annum, on the paid-up capital of the corporation, which will require 15,000 0 0

Leaving	£	15,034	12 0
From which deduct balance of bad debts		10,078	17 8
There remains, as the commencement of a reserved fund	£	4,955	14 4

The monetary crisis which has been so severely felt, not only in this country, but throughout Europe and America, is of such recent occurrence that there has not yet been time to ascertain what effect it will have upon the bank's business, but the directors do not entertain any apprehension that it can be serious; whilst on the other hand they cannot flatter themselves that the bank will escape loss. In the meantime they have much satisfaction in reporting that every ascertained loss has been provided for, and that they will be able fully to meet any doubtful contingencies which may arise from recent events, without interfering with either the dividend or the steady increase of the reserved fund, of which the foundation has been laid this day.

The CHAIRMAN said the report which had just been read was not quite so favourable as some of those of past years, but it confirmed what he took the liberty of anticipating at the last meeting, that they would wipe off the bad debts and lay the foundation for a reserved fund (cheers); but recent events made it not quite so large as could have been wished. With regard to the losses, no person except those who had been asleep during the last two months could be so sanguine as to expect they would entirely escape; however, considering the intensity of the pressure, they had escaped uncommonly well. (Hear.) In the spring of the year, when an extraordinary rise took place in the price of sugar and other produce, instructions were sent out to the managers to be very careful, and not to be led away by speculation; these had been strictly followed, and out of bills amounting to 1,300,000*l.*, all had been paid within 8000*l.*, which were returned, and might yet be recovered. They had also had considerable remittances through the United States, all of which had come to hand without injury to the bank, so that upon the whole he considered they could not be otherwise than satisfied, as the severe test proved the soundness of the business. The bank had gone through some reverses; but the bad debts, which at one time stood at 210,000*l.*, had all been paid off, while the shareholders had received dividends averaging for the last five years at least 4½ per cent.: and their shares, which at one time were down to 5, now stood at 20, and before the crisis were at 30. Looking, therefore, at the crisis they had passed through, he thought their position was very favourable; he, therefore, begged to move the adoption of the report.

Mr. HELME congratulated the meeting on the state of their affairs after the ordeal they had gone through the last half-year, and through the exertions of the directors they had wiped off all the bad debts, and founded a reserve fund. (Hear.)

The CHAIRMAN next proposed that a dividend at the rate of 3*l.* per cent. for the half-year be declared, payable on and after Jan. 12.

A vote of thanks to the Chairman terminated the proceedings.

UNNECESSARY ALARM OF JOINT-STOCK SHAREHOLDERS—(*From a Correspondent*).—Upon several occasions we have referred to the Joint-Stock Companies Act, 1856, as a model Act, both for its comprehensiveness and the ease with which persons, not of the legal profession, could ascertain from it the privileges conferred upon, and the duties to be performed, by those availing themselves of its provisions; so that the recent proceedings in the Birmingham District Court of Bankruptcy would almost lead us to ask whether it is not preferable for those applying for and administering justice to read Acts of Parliament before they complain of want of foresight in their compilation. In the case alluded to, Mr. John Smith (a solicitor) stated that his clients (a joint-stock company under the the Act of 1856) had been served (under sec. 68) with a notice from an alleged creditor, and that the Act did not make any provision whatever for claims given notice of, which were disputed, never perhaps contemplating that such a thing would take place, and there certainly was not any precedent to guide his Honour as far as he (Mr. Smith) had been enabled to ascertain. He, therefore, asked his Honour to take the clause in the Bankruptcy Law Consolidation Act, which had reference to trading debtors' summonses, and deal with it by analogy. His clients did not owe one shilling of the money claimed, and he asked for leave to call upon the party giving the notice to show cause why his claim should not be treated as null and void. If his Honour would refer to the Act relating to trading debtors' summonses, he would there find that eight days were allowed to compound, secure, or otherwise arrange a claim which had been filled according to due notice, and he now applied in this case that leave be granted to his clients to present a petition praying for the said notice and claim to be dismissed, upon the ground that neither the alleged debt nor a shilling of it was owing. If the Court would not grant the application, then, according to the Joint-Stock Companies Act, the estate must be wound-up in bankruptcy, as the statute made no provision for notices on disputed claims. The Court decided to grant the application, the hearing to take place in ten days, which would be within the 21 days allowed by the Act between the time of notice and the time of petitioning the Court. Now, had either Mr. Smith or the Commissioner read the Act, the one would never have appeared in Court upon such an errand, and the other would, we think, have refrained from interfering with the matter until the creditor's petition was brought before him for hearing; for although an order for winding-up may (not must) be made (section 67) whenever the company is unable to pay its debts, it is explained (section 68) when a company shall be deemed unable to pay its debts. The 70 h section, however, gives the Court the power to dismiss the petition with or without costs, to be paid by the petitioner, who therefore, in this instance, would of course be the *sol-disant* creditor. If the position of the company was so far jeopardised by being asked for payment of an alleged debt as the proceedings would make it appear, it is evident that the Commissioner had full power to deal with the case if the alleged creditor petitioned, and that the company might, by simply trusting to the Act under which they were constituted, have saved themselves the trouble and expense of petitioning to have the matter settled by the Bankrupt Law Consolidation Act, 1849. We can only regard this as another instance of the expenses needlessly incurred by parties who prefer placing implicit reliance in their legal advisers to troubling themselves with ascertaining their duties and responsibilities, although every facility is afforded for obtaining the necessary amount of information. [With reference to the law of companies constituted under the Act, which appears so incomprehensible to the Birmingham gentlemen, the "Exposition" compiled by Mr. Tapping would appear precisely calculated to remove their difficulties, as it explains the provisions of the Act, without entering into legal technicalities.]

GOVERNMENT SCHOOL OF MINES.

The lecture by Mr. WARINGTON SMYTH was "On the Mode of Ascending and Descending Mines." The simplest way in which this was performed was by several pieces of wood, one above the other; this is very commonly used at Salzburg; if there be a sufficient incline, steps are cut. At Mr. Beaumont's mines, in Northumberland, the horses are taken down every day 70 fathoms, and are then brought up again. In metalliferous mines their employment is a rare exception. A diagram was shown of the mode of working in the Tamar Mine. There an incline is used, although the shaft is down 205 fathoms. The travelling over an inclined plane is much more laborious than climbing ladders. In metalliferous mines they generally descend by ladders; while in collieries machinery is almost always employed. A considerable question with the use of ladders is, in the first place, their economy; secondly, the safety of the men has to be regarded; and, thirdly, the loss of time in ascending and descending has to be taken into consideration. In some mines the workmen descend with a rope; and in France a very primitive method is still in practice in some parts. A stock of wood, with cross pieces, is placed against the side of the shaft, and by this simple mode the ascent and descent of the miners is performed; the task is accompanied with some difficulty, and no slight danger. The ladder, being attached to the surface, is very heavy, and hangs in a perpendicular position. It distresses the men more to climb a perpendicular ladder than one on an incline; in the former a man has the whole weight of his body hanging by his hands. The difference between the two was then shown, and illustrated by a diagram. In climbing to such a height as the gallery of St. Paul's, or any other cathedral, great inconvenience would be encountered; yet this is not in any way to be compared to the fatigue which has to be undergone in the ascent of many deep mines. In general, in the shafts sollars are placed at convenient distances; these, in some parts of Hungary and the Hartz, are so near that there are only 2 or 3 fathoms between them, so that if a man falls there is not much danger of his being seriously hurt. In many sollars, a pent-house, or shed, was placed over the ladder to protect the men from water, or a fall of rock. Many accidents occur from the sollar not being examined; and this is especially the case in those mines where the wood decomposes quickly—great attention is required to this point. The ladders are about a foot wide, with two cheeks of wood, the staves being of timber or iron. In England, where they are of the former material, they are round; while on the Continent they are flat. The advantage of these are, that they do not require such a large grasp, nor are they liable to turn round; in general, iron ones are now used; in a climate like the western districts these answer well, but are not applicable where the temperature is not so mild, as near the surface, and with a cold draught, the fingers of the miners would be liable to be numbed. The staves in general are either 10 or 12 inches apart. Where there are sulphates these should be looked to, as occasions had shown that an iron stave had been so corroded that it merely had a thin coating of rust, and on being touched would crumble away.

In the collieries in England they very seldom used ladders; whereas on the Continent it was compulsory they should have one or two. The lecturer then alluded to a mode prevalent in Derbyshire, where pieces of stick were placed in the sides of the shaft, and the men dropped from one to the other. In all parts of the mine they could not have ladders—these would be liable to be destroyed by blasting and other accidents; in general, either a chain ladder was used, which could be drawn up, or a small one of wood. Where wood was plentiful, as in America, Norway, and Hungary, they had a sump ladder, which was only a round stick of timber, with notches by way of steps cut in it. M. Lambert, of Mons, had contrived a spiral ladder. According to the published statistics, in Belgium there were less accidents by ladders than with chains or ropes. Although our inspectors of coal mines were endeavouring to introduce a better system, he was of opinion that there was a considerably greater proportion of accidents in collieries than in the metalliferous mines of Cornwall and Devon. In collieries, men are in general lowered and raised by the same means as the coal and other material. In Somersetshire, each man had a loop of rope in which he placed his foot, and so descended and ascended. In former times, in the north of England, so reckless where the people employed, that it was not an uncommon sight to see men and boys grasp at the chain as it was descending, and so hang on by it; such feats of daring are, however, at the present day forbidden.

Mr. Smyth then alluded to the man-engine, or, as it was called by the Germans, *fahr-kunst*. For the introduction of this into England, great credit was due to the Polytechnic Society of Cornwall. Messrs. Hocking and Loam had erected the first at Tresavean; there was another at Fowey Consols, and at the famous old mine of Dolcoath, and at Levant. The invention was now extensively used in the coal fields of Westphalia, in Saxony, Prussia, and Belgium. The lecturer then illustrated, by some well-executed diagrams, the difference of the single and the double rod. Great discipline must be observed where these are used—the men ought all to go down on one side and come up the other. In the Harts, when first introduced, rods had been employed; in their place, at present, wire ropes were substituted. By these means there was a great saving of time, and the health of the men was better preserved.

The lecture, by Dr. PERCY, was a continuation of the previous one on "Lead Smelting." In that he had alluded to the slag hearth with three tuyeres. The lead ores formerly were very rich in slags; numbers of them had been thrown away, but now they are greatly sought after, and very few are still remaining in Derbyshire. A description of the furnace was then given, illustrated with a diagram. The lead has to trickle through the cinders in the breast-pan, which is kept filled up while the slag flows over it. The width of the breast-pan is 2 ft. and the length 2 ft. 3 in.; the thickness of the iron 1¼ in.; the height of the furnace is about 8 ft.; the flue 2 ft. 4 in. wide by 3 ft. in height; the quantity of slag smelted was 7½ tons; 10 tons of coke could reduce 34 tons of slag. Occasionally iron slag (which is the tap cinder of the blast-furnace) and fluor-spar are required as fluxes. There were some peculiarities with lead smelting at Pontgibaud, but this he should make no further allusion to, as the works had now passed into other hands. He would now speak of condensation. A diagram was then drawn of a furnace with condensing apparatus. From the furnace to the chambers it was first carried up a height of 52 ft.; afterwards a descent made from these (one of which had two jets of water running constantly over it, while the other contained stones, which were covered with common heather, kept constantly wet) of 116 ft. Two fluxes connected with this were carried horizontally 474 ft.; a further rise to another chamber was then made of 99 ft., and from this there was an extension of 166 ft. The above description it is not in our power adequately to do justice to, as the diagram was so elaborate that it would require the plan in order to fully enter into its merits.

One of the most important processes connected with lead smelting in modern times was its desilvering, and this had been effected in a most successful manner by Mr. Pattinson. Like many more valuable discoveries, this had been originally brought to light by an accident. A crucible happened to fail with its contents, when Mr. Pattinson made the observation that lead when in a fluid state contained more silver than it did when solidified. There are some people who merely see with their eyes, others with their heads; and this is the result of observation. It was found that lead containing 3 ozs. of silver to the ton can be reduced at a profit. A patent was taken out, and many persons have been materially improved in circumstances by it. The lead is placed in an iron pot and stirred round, and the fluid lead is always richer in silver than that which solidifies first. A model was then shown of the crystallising pots, with the smaller ones by the side, in which the ladle can be plunged when it becomes foul, in order to be cleansed, the latter being kept at a higher temperature. Dr. Percy then elaborately detailed the whole of the process, by which 864 cwts. of lead were reduced in the seven pots, as well as the market-pot, together with the proportion of silver in each. A description of this valuable process some time since appeared in the *Mining Journal*, and we are thus induced to notice it so briefly on the present occasion.

COAL—ON THE FORMATION OF FAULTS AND CLEAVAGE IN STRATA.

At the Manchester Geological Society, on Tuesday, Mr. G. W. Binney, F.R.S., F.G.S., president, in the chair, the members proceeded to discuss the paper on this subject read at the previous meeting by Mr. Joseph Dickinson, F.G.S., Government Inspector of Mines, and one of the hon. secretaries of the society [see *Mining Journal* of Dec. 12]. Mr. Pearce (Wigan), with the Chairman, and several other gentlemen, took part in the discussion.—In replying, Mr. Dickinson said that the views of the speakers had generally coincided with his own. As stated in his paper, prepared in 1841 for the Geological Society, he did not read it, because, upon communication with some friends, they objected that there was no such thing as crystallisation in coal. This was especially so with Dr. Buckland, who objected *in toto* to the term, and would not in any way sanction the paper unless the word was expunged. Dr. Buckland suggested "aggregation" as a substitute; but as he (Mr. Dickinson) was convinced he was right he did not yield. He had now to produce a specimen of South Wales steam coal, which he picked up on the bank of the Aberdare Valley Mine; it came from the top seam there; and he thought it as clear a proof of crystallisation as could possibly be produced.—The Chairman: Crystallisation is admitted on all hands, I believe.—Mr. Dickinson said he had another specimen, which came from the Roger Mine, at Dukinfield. The colliers there seemed to think that this stone, from its rounded form, had been rolled a considerable distance; but it was found in the heart of the coal, and upon examination of some of the sharper edges, it would be seen to have been part of the vein-mass. A third specimen—which he considered a rude crystal, while the one from Dukinfield was perfect—came from the Gannister coal, near Burnley. He had also a specimen of coal from Australia, showing the cleavage at right angles; and showing also that wherever coal was found it appeared to possess this structure.—Mr. Pearce examined this specimen, and said it was clear enough that there were marks of the "end and board."—The Chairman said the nodules produced were old acquaintances of his. He published a paper eight or ten years ago, when he had only been able to get three specimens in the whole of England; and he formed the hypothesis that they were meteoric stones. The subject had been a great deal debated, and various conclusion come to, so that he was glad to see another specimen.—Mr. Dickinson: I could get you many more, and larger.—The Chairman said he did not believe that specimens like that from Dukinfield could be found every day. Such formations as that from the neighbourhood of Burnley were common enough, and he considered them to be nothing more than the aggregation of salts held in solution by the water that covered the mass of which the coal was formed. After a rather long conversation, the thanks of the society were voted to Mr. Dickinson for his paper.

Mr. A. Knowles read a contribution from Mr. Matthias Dunn (Newcastle-on-Tyne), entitled "Memoranda on the Govan Colliery" (near Glasgow). The paper was composed of notes, made some years ago, by Mr. Dunn, in the course of his official duties as inspector.—The reading of it led to Mr. Pearce giving details as to two condensed air-engines which he had in use at Wigan, for drawing on a level, with an incline of one in three, and a length of 500 yards; the shaft being 234 yards deep, and the steam-engine for condensing purposes being above ground, and full 50 yards from the mouth of the shaft. In reply to questions, Mr. Pearce said he could give an estimate of the cost of the air apparatus, but not a comparison with the cost of steam, as he never knew of steam as applied under such conditions.—Several gentlemen said they considered the matter of great practical importance, it being most desirable, for the avoidance of accidents from ignition of the coal, that there should be no fire below ground, other than that in the furnaces; and Mr. Pearce promised to supply, hereafter, some data as to cost, &c.—After thanks were voted to Mr. Dunn, Mr. Dickinson presented his specimens to the society, which were, of course, accepted with thanks. Mr. Dickinson urged the colliery managers present to send their overlookers, or other good men, to inspect the museum of the society, which was open to all gratuitously.—The Chairman said if any such would come when he was in the neighbourhood, he should be exceedingly glad to accompany them in their inspection.

The Chairman also called attention to two slabs of limestone, containing beautiful specimens of the new genus of crinoides, presented to the society by Mr. E. Wood, F.G.S. (Richmond, Yorkshire). It has been named by Prof. L. de Koninck (Liege), Woodocrinus macrodactylus, in honour of the gentleman who discovered it, and whose liberality has enriched most of the public museums of England with specimens. These fossils occur in a thin bed of limestone, known as the "red bed," in the Goredale rocks of Swaledale; and although several specimens of the new genus, besides the one named, have been found in the bed, it is singularly barren of organic remains, affording no other than the teeth of a fish—Petalodus Hastingii.

COAL IN IRELAND.—At the Royal Dublin Society, on Tuesday, Prof. Sullivan read a paper written by Mr. P. Buchan, on the "Composition of the Iron Ore of the Connaught Coal Field." The first part consisted of a survey of the Connaught coal district, which extends over part of the counties of Leitrim, Sligo, and Roscommon, and is about 15 miles from north to south, and 20 miles from east to west. The region consists of a series of lofty hills or mountains surrounding Lough Allen. The coal field is not continuous, but consists of a number of isolated tracts on different mountains, interstratified with yellow quartz ore, sandstones, and dark grey slate, &c., and the whole tract is that of a mountainous district, situated in a basin-shaped depression of carboniferous limestone. The Connaught coal field forms the largest and most important of the bituminous coal fields of Ireland—of that coking quality which is adapted for locomotive purposes. The second part of the paper treated of the statistics of the coal seams in the different mountain ranges, and Mr. Buchan, whose experience as a miner is a guarantee for the correctness of his calculation on the subject, estimates the area of the coal field at 2000 acres. The thickness of the seam varies from 20 in. to 8 ft.; but, allowing an average of 22 in., the thickness of the seam in the Biahlieve range, after making deductions for washing, &c., the produce of the coal field might be estimated at 8,027,300 tons of good coal, available for any purpose. Prof. Sullivan observed upon the superiority of the Belgian system of washing coal over that pursued in the Irish coal mines, and stated that a ton of coal could be washed in the former country for 3*d.*, while in Ireland the cost of the operation was from 10*d.* to 1*s.* He also mentioned the fact that the French system of washing coal, as shown at the London Exhibition, was successfully adopted in the Newcastle collieries, where from 400 to 500 tons of coal per day can be washed at a cost little above 2*d.* per ton. The concluding part of the paper had reference to ironstones, which abound in the coal district, and included some observations on the facilities which the Connaught coal field affords for the manufacture of iron. Prof. Sullivan stated that the only important point contained in this section of the paper was the curious fact ascertained by Mr. Buchan, that the ironstones capable of being worked were confined within a limit of 100 ft. The paper seemed to excite considerable interest, and at its conclusion the meeting testified its approval of the results of the observations of the writer.

MINERAL WEALTH OF NEWFOUNDLAND.

TURK'S HEAD MINE (2000 shares, of 1*l.* each, limited liability, upon which 10*s.* per share has been paid), is situated near Brigus, Conception Bay, and is the next adjoining square mile to the English Ridge property. It is an entirely new enterprise. After an expenditure of about 900*l.*, it has yielded about 20 tons of ore, worth over 275*l.*, and is now being worked night and day by Cornish miners. The men are engaged in sinking a shaft, now some 6 fathoms deep, against the eastern wall, and are finding thereon some rich spots of purple copper ore. The ground is amygdaloid trap and conglomerate upon which, and the matrix in which the ore is found calcareous spar. F. N. Gisborne, Esq., of St. John's, Newfoundland, is president of the company.

MINERAL RIDGE MINE (2000 shares, of 1*l.* each, limited liability, upon which 10*s.* per share has been paid), is situated near Brigus, Conception Bay, and is an entirely new enterprise. Upon an expenditure of about 700*l.*, it has thus far yielded 15 tons of ore, which have realised over 400*l.* The ore is a rich seam of grey copper in calcareous spar running through amygdaloid trap, which again lies against slate. Little more than surface workings have as yet been attempted. The company have imported Cornish miners, who purpose sinking a shaft early in the spring against the western wall, at a point where it dips under a small marsh or bog, some 10 fathoms distant from the slate formation. Charles Fox Bennett, Esq., of Bristol, England, and St. John's, Newfoundland, is president of the company.

LAKE SUPERIOR COPPER MINES.—The following table shows the amount of copper shipped from Ontonagon, by the various mines of that district, during the season of navigation of 1856 and 1857:—

	1857.	1856.		1857.	1856.
Minnesota.....lbs.	4,236,605	3,715,796	Astec .....lbs.	87,068	110,725
Rockland.....	779,452	398,473	Evergreen Bluff...	71,174	38,554
Peninsula	1,236	1,178	Ridge	96,699	124,193
National	416,982	230,044	Mass	17,275	23,067
Norwich	180,176	231,279	Toltec	54,409	119,551
Windsor	4,735	44,025	Ogimac.....	12,176	—
Nebraska	58,695	66,307	Other mines	—	138,191
Adventure	380,945	389,687			
Total.....				lbs. 6,343,411	5,534,071

Making a total of upwards of 3280 tons, the estimated value of which is not less than $1,000,000.—*Detroit Advertiser*.

THE UNITED STATES EXPEDITION TO THE ISTHMUS OF DARIEN.—Dr. Cullen presents his compliments to the Editor, and requests the insertion of the following letter, received by him from Lieut. Craven, Commander of the United States expedition to the Isthmus of Darien:—

"*Bound Brook, Sept. 7.*—Your letter of Aug. 15, with accompanying parcel, was yesterday received by me, through the Navy Department. My party for the survey of the Isthmus of Darien has been some time in organisation, and is now complete. We are waiting for the dry season, and expect to leave New York by Oct. 1. You would, therefore, not be in time to join us, even if I had a suitable position to offer you, which is not the case. I have to thank you for the valuable books you have sent me. I had before seen Commander Prevost's report, as I take great interest in everything relating to a part of the world which must, at some future time, be the highway of all nations. The especial duty of my party will be the survey of the Atrato Valley. We expect to be seven months absent from New York. Should I have any time remaining after the survey of the Atrato route, I may, with the consent of the Navy Department, take a cursory glance at the Darien route. I hardly anticipate accomplishing so much, however, as I intend running lines of levels from sea to sea, through the Atrato Valley, and making a searching examination of all hydographic questions connected with this great project. Any communication you may forward, through the honourable the Secretary of the Navy, will be safely received by me.—T. AGGS. CRAVEN, Lieut. U.S.N."

The following remarks on the past week's changes in the market from Mr. Crofts, he suggests should be taken in connection with those laid before the public in our last Journal:—On that occasion a prediction, founded on previous experience, was ventured upon, that the market had seen its lowest point, which has been remarkably verified by the fact, as will be shown. The first event, however, to be noted is the reduction of the Bank rate to 6 per cent., and the still lower value of money in the discount market to 5 per cent., large sums having been refused by the discount houses in the course of the week at 5½. This rapid transition is not only remarkable, but may be called unprecedented in the annals of panics, which have generally, if not always (even in 1847), recovered their healthy tone by a gradual process, occupying many months, whilst here we see the phenomenon of a difference of 5 per cent. in the value of money in little more than 14 days! Undoubtedly, the cause of this rapid change is to be found chiefly in those wonderfully increased facilities of communication which render the "whole world kin," and by the almost annihilation of space. So must be the effect, perhaps increased in degree, in future panics, which, however, we will not anticipate. The market, in accordance with the law of being governed by the value of money, has shown, even earlier than anticipated, a lively business and advanced prices, thus proving that a portion of the speculative public have not been unmindful of their own interests. Some specimens, by way of illustration, may be given of the advance:—West Basset have risen from 21, 22 to 24; North Basset from 11½, 12 to 14, 14½; Wheal Edward from 6½ to 7½, 8; Vale of Towy, 12*s.* 6*d.* to 18*s.* 6*d.*; East Russell, 2½ to 3½; Pendeen, 3½ to 3¾; Great Wheal Alfred, 3½ to 4¼; Trelawny, 25 to 27½; Basset, 140 to 155; whilst the advance being founded chiefly on the intrinsic merits of the mines themselves, this enumeration may be considered safe shares to invest in. As prominent facts, Virtuous Lady and Okel Tor are in excellent demand, the former at advanced prices, in consequence of another most important discovery in the old mine, the value of which can scarcely be over estimated, always assuming that the reports received from the officials, and also from private sources, are free from any suspicion of misrepresentation, of which, however, the writer, it must be understood, by this reservation implies not the least doubt.

Mr. Lelean communicates the following:—

The expectation that was generally entertained of a further reduction in the rate of interest by the Bank of England, which took place on Thursday, with the improved state of things in America, according to the latest advices, has tended greatly to improve the tone and tendency of things in the share market during the week; and there is no doubt at present that it will become even much better yet, in consequence of the favourable complexion of the news from the rebellious provinces of India. These two great countries are our best customers and consumers of copper and tin, and their improved condition will have a very powerful influence on the prices of these metals. Previously to the rebellion in India, and the crisis in America, our produce was not equal to the demand. Latterly the prices of tin and copper have fallen so low that a great many mines have stopped working, and the best of our copper and tin mines have fallen 100 per cent. on the average; whilst in most of the good and progressive mines the shares have been almost unsaleable. By buying at this, the turning point, large profits will certainly be realised during the year. In North Levant (situate between the Levant and Pendeen Mines, immediately adjoining them, the former having paid 1062*l.* per share in dividends), 14,000*l.* has been paid up, and about 10,000*l.* worth of ore raised and sold. The whole of the capital and receipts has been laid out in developing the mine, and it is certainly the cheapest and surest speculation in the market. The present price is 3*l.* 10*s.* to 4*l.*, which is at the rate of 7000*l.* to 8000*l.* only for the entire concern. It has a pumping-engine, capable of sinking the mine 200 fms., steam-whim, and steam-stamps, with plant and tramways, all complete. The ends of the various levels are producing about 150*l.* worth of tin and copper per fm., which will soon be increased to twice that quantity. The affairs of this mine were until recently managed in London; it has, however, passed through the Stannaries Court, and 2000*l.* additional capital has been subscribed. Mr. George Higgs, of Penzance, is the manager. Carnyorth is also very cheap, and deserves attention. There are likewise enquiries for Ding Dong, but I have not been able to ascertain the nature of the alleged improvement in the mine. Great Wheal Vor is doing a great deal of damage to the small tin mines, and is draining the adventurers fearfully: great changes must take place here very shortly. The Levant Mine has improved, and there are enquiries for the shares. The Providence Mines are very low; the returns are about 80 tons of tin per quarter. Improvements are reported in St. Ives Consols and North Basset. A change has taken place in the ground at Balsoon, and it is hoped that something good will soon be met with, as the adventurers' patience is nearly exhausted. East Providence is spoken highly of, and is likely to make equally as good a mine as its rich neighbour; the shares are selling very cheap—about 10*s.* to 15*s.* Margery is looking better, and is likely to improve; these shares are very low at present, selling at about the price of the plant. Lady Bertha is the star of the East, and will have an advance of 300 per cent. on present prices during the year. Before shareholders part with their interest, let them employ an independent agent to examine the mine, as I have done. Pendeen has, as I predicted, risen 500 per cent. within 12 months. Molland is selling ridiculously low, and at less than the value of the plant: six months from this date will determine its further progress. Wheal Edward is a good mine, and is spoken highly of, as the bottom part of the south lode is reported to be richer than the other. On the whole, I hail with great satisfaction the improvement in the share market, as well as the discoveries in the mines, and wish dealers and adventurers a happy new year.

MEMS. OF MINES AND MINERS.—No. XXVI.

Capt. THOMAS BRAY (Wendron Consols) is one of those hard-working, plodding miners who, by industry and intelligence, raise themselves to fame as well as to a good position in society. The captain possesses confidence without egotism; and the manner in which he has laid out and worked his mines is a sufficient proof of his ability. Capt. Bray enjoys the entire confidence of the company he so ably serves; indeed, if sobriety, and attention to the interests of employers entitle any man to respect, Captain Bray deserves it in a prominent degree; he owes his elevation to his present position to no effort of favouritism or nepotism, but solely to his well-known character as a miner and a man; a fact many a youth would do well to remember whilst following his dangerous and difficult profession.

Mr. EDWIN LEE (Penzance) is the nephew of that bold mining speculator, Mr. James Halse, whose mantle has well descended on him, he being also an extensive and fortunate adventurer. It is our duty to chronicle the lucky as well as the unlucky in mining, and it gives us double pleasure to do so in this instance, as Mr. Lee was unfortunately induced some years since to join in a ruinous smelting speculation, by which his large property was considerably involved. Fortune however smiled on him, and his mining adventures have placed him in a situation of considerable wealth; whilst his honourable conduct during his temporary trial and difficulty have given him a distinction and elevation of character nothing but such severe tests can ever obtain for any person. As a wealthy gentleman and land proprietor, Mr. Lee is distinguished for his urbanity and liberality, and is universally respected by the poor as well as the rich, which we wish him a long life so deservedly to enjoy.

Captain HENRY HARRIS (Wheal Pool) affords an excellent instance to what a man with but slender education may attain by a thoroughly independent and straightforward course of conduct, without patronage of any kind. He has been selected to work this promising speculation. An acquaintance of many years with the author warrants the assertion that no better man for the situation could have been selected where hard work and difficult mining duties are to be undertaken. Captain Harris is considered a first-rate tinner, having had long experience in that department of mining, than which there is no part requiring more care and extensive acquaintance with the subject. In the mine under the care of Captain Harris more than ordinary skill is requisite; part of the property consisting of a tin stream mine, where the work has to be removed from beneath the silt and bed of a river, great care and skill in timbering must be exercised to prevent accidents. Having known him working in dangerous mines, we feel confidence in the security of his mine, and in the manner he will carry out his hazardous undertaking. Capt. Harris has had the charge of several mines before this, in which his conduct was all that was required, and a guarantee for its being so in this.

FOREIGN MINES.

The Fortuna Company have advices from Spain to Dec. 26:—CANADA INCOSA:—The lode in the 2nd level, east of Lownde's shaft, is at present worth 1 ton per fm.; this end is looking more regular and promising than it has done for some time past. The lode in the 3d level, east of Kennedy's, contains a little ore, but not enough to value. The lode in Gracela's winze is producing 1 ton per fm. The lode in the 4th level, east of Fortuna winze, is chiefly composed of spar and light capel, spotted with lead, but not to value. The lode in the Esperanza winze is producing about ¼ ton per fm. The lode in the 5th level, east of Purgatorio's winze, is poor.—West of Taylor's Engine-Shaft: The lode in the 5th level, east of Francisco winze, is worth ½ ton per fm. The lode in the 6th level, east of El Clavel winze, is worth 1½ ton per fm. The lode in the 5th level, west of Buen Provecho winze, is 1½ ft. wide, composed of calcareous spar, quarrs, and lead ore, worth 1 ton per fm. for the latter. The 3d level, west of O'Shea's shaft, is producing 1¼ ton per fm. The lode in Oveido's winze is worth ½ ton per fm.—LOS SALIDOS The lode in the 3d level, west of sump winze, is at present small and poor. The lode in Alvina's winze is worth 1½ ton per fm. The lode in the 3d level, east of Pedro's winze, is worth 2 tons per fm. The lode in San Gabriel's shaft is worth 1 ton per fm. The lode in the 2d level, east of Cologan's winze, is worth ½ ton per fm. The tribute department is looking much the same as for some time past, and surface operations going on satisfactorily.

The Linares Lead Mining Company have advices from Spain to Dec. 28:—POZO ANCHO: West of Engine Shaft: The 55 is at present unproductive. The lode in the 75, west of RAMON'S winze, is worth 1½ ton per fm. The lode in CARILLO'S winze is worth 1 ton per fm. The 40, east of Warne's shaft, is unproductive at present. The lode in the 40 is worth 1½ ton per fm. The lode in the 31 is worth ½ ton per fm. The lode in the winze under the 20 is poor at present.—East of Engine Shaft: The 85, east of Navarro's winze is unproductive at present. The 75, east of Shaw's shaft, is unproductive at present. The lode in the 55, east of Collejon's winze, is worth ¼ ton per fm. The lode in Cordova's winze, is worth ½ ton per fm. The lode in the 65, west of Lucas's winze, is worth 2 tons per fm. The lode in the 65, east of Thorne's shaft, is worth 1¼ ton per fm. The lode in Fernando's winze contains stones of ore, but is not of commercial value. The 55, east of Martinez cross-cut, is not to value at present.—North Lode: The lode in Taylor's shaft is not so productive as it has been, but is still large, and worth 1½ ton per fm. The lode in the 55, east of Martinez winze, is a powerful gossan lode, worth 2½ ton per fm. The lode in Gomez winze is worth 1 ton per fm. The lode in the 45, east of Antonio's winze, is at present unproductive. The lode in the 45, driving on the branch intersected in Field's cross-cut, is worth 1 ton of ore per fm. The level driving east on the same branch was extended 3 fms. 0 ft. 1 in.; this end has altered its bearing considerably, and is making off from Field's lode which it was previously approaching. The lode in the 31, east of Field's cross-cut, is not to value.—Field's Lode: The lode in the 45, east of Field's shaft, is worth ½ ton per fm. The lode in the same level west is worth ⅔ ton per fm. The lode in the 31, east of Field's shaft, is worth 1 ton per fm. The lode in Justo's winze is not to value at present. The present value of the lode in the winze sinking below the 21 is 1 ton per fm. The tribute pitches throughout the mine are fairly productive, and the surface operations are going on satisfactorily.

The Wildberg Mining Company have advices from Capt. Walls to Jan. 1.—Yesterday we measured and set the whole of the underground bargains, with the exception of Carter's shaft and the Erz Kammer, where we were unable to go in consequence of the water coming from a small breakage in the pitwork, but I am glad to say it is again all right, and the men at work. I informed the council in my last that in sinking the Erz Kammer we had drained the Kluft, which was draining the Dornergang lode; we are now through the Kluft, and finding no ore, as we expected to do, on the north side, we think it best to suspend the sinking, and remove six of the Englishmen to drive the deep cross-cut north, so as to get it through and lay down a tramroad with all possible speed, to enable us to bring the stuff from the different workings on the Dornergang to Carter's shaft. In the meantime a steam-whim should be erected near this shaft for hauling the stuff to surface; we could then put on more miners, and an increase in our returns would soon follow, but without steam-power for hauling we can do but little in addition to our present returns. We intend commencing to drive east from the bottom of the Erz Kammer on Monday next, by two Englishmen and two Germans; this will be pushed on vigorously, so as to lay open this course of ore for back stopes.

The Lusitanian Mining Company have advices from Portugal to Dec. 26:—PALHAL MINE: On Basto's Lode, the ground at Taylor's engine-shaft has rather improved. The ground in the rise above the 28, east of Taylor's engine-shaft, is hard; we have not yet taken down any lode. The lode in the 28, west of Taylor's engine-shaft, is 1 ft. wide, worth ⅛ ton per fm. The ground in the 18 fm. level cross-cut, driving south towards the mill lode, is without alteration to notice. The lode in River shaft, sinking below the 18, is 3 feet wide, composed of quarts and prian, with spots of mundic, lead, and copper. The lode in the 18, driving east of River shaft, is 2 ft. wide, composed of quartz and stones of ore of a low quality. The lode in the 8, driving east of River shaft, is 3½ feet wide, composed of quartz, with two small branches of ore in it, worth together ⅛ ton per fathom. The lode in the adit level, driving east of Pinto's shaft, is 3 ft. wide, worth 1 ton per fm. The lode in the adit level, driving south-west on the slide lode, is 2½ ft. wide, composed of flookan and quartz, and a small string of black fine mundic. The lode in the stopes Nos. 1 and 2, in the back of the 18, west of Taylor's engine-shaft, is 1½ ft. wide, worth 1½ ton per fm. each. The lode in the stopes Nos. 2, 3, and 4, in the back of the 28, west of Taylor's engine-shaft, is 2 ft. wide, worth 1½ ton per fathom each. The lode in the stopes Nos. 3 and 4, in the back of the 28, west of Taylor's engine-shaft, is 2 ft. wide, worth 1½ ton per fm. each. The lode in the stopes No. 5, in the bottom of the 18, east of Taylor's engine-shaft, is 2 feet wide, worth 2 tons per fm. On Mill lode, the lode in the stopes in the back of the 8, east of Antonio's winze, is 8 in. wide, worth 1 ton per fm. On House lode, the lode in Pisco's winze, sinking below the adit level, east of the old shaft, is 1 ft. wide, composed of quartz, with a small branch of black ore on the north wall of it, but not enough to value. At Oak shaft, the ground is of much the same quality as it has been for some time past.—CARVALHAL: The ground in the new adit level, driving east, is of good killas; we have driven through another small branch of lead and mundic.

The Pontgibaud Mining Company have advices from Capt. Rickard to Jan. 4.—ROURE: The adit level, south from Anna's shaft, is looking promising, and producing 1 ton of ore per fm. The St. Mark's lode, in the adit north of cross-cut (driven east from St. Peter's shaft), is laying open good stoping ground; we estimate the present end of the level to be worth 1¼ ton of ore per fm. The same level south from cross-cut is turning out 1 ton of ore per fm. The adit level, south of Agnes' shaft, is in a large lode, bespangled with ore throughout, but not rich, we estimate it to be worth ¾ ton of ore per fm. The winze sinking under the adit level, north of Agnes' shaft, is still in a good lode; the part carried in the winze is worth 3 tons of ore per fm. The stopes throughout Roure are yielding large quantities of fair quality work.—ROSIER: The 80 metre level, north from John's engine-shaft, is looking promising; the lode is letting out much water, and producing occasional stones of ore. The tribute pitches in this mine (24 in number) are turning out fairly.—MIOCHE: The 40 metre level, north of shaft, on the No. 3 lode, is still laying open good stoping ground, the lode is large and orey throughout; the part carried in the level is worth 1 ton of ore per fm. The tribute pitches, on Nosky's lode, in the adit level, are turning out tolerably well, and we have begun a cross-cut in the 20 to intersect it in that level. We have now three pares of men stoping: they, with the ore from the levels, are giving as much stuff as we can dress at present.—PRANAL: The 70 metre level, south from Bontoux's shaft, on the Armand lode, is still opening well; the present end is worth 2 tons of ore per fm., but there is still standing in the side a part of the lode, which we have just begun taking down, and shall soon ascertain its whole size and value. The 30, south from Bontoux's shaft, on the same lode, is turning out 1¼ ton of ore per fm.; the ground in this end is unusually hard for this neighbourhood. We expect a further improvement here when the rock becomes a little softer. I have nothing new to report of either Barbecot or Brot—those two mines being worked principally on tribute. Our stopes in Pranal, Roure, and Mioche, are giving as good returns, but I am sorry to say the weather is still very unfavourable for dressing. Our sampling for Dec. was 171 tons (less water). All our machinery is in good order, and our underground water even less than in summer.

MINING NOTABILIA.

[EXTRACTS FROM OUR CORRESPONDENCE.]

The market has been quite active during the week, when compared with several preceding months. The general feeling is, that the year now having commenced so favourably will be one of the most prosperous for mining pursuits that has been witnessed for many previous ones. With cheap money an increased business may fairly be anticipated, and mines paying from 12½ to 20 per cent. will certainly not be overlooked by parties seeking to employ spare capital, &c. The principal business of the week has been in the following mines, some of which have experienced a considerable rise:—Wheal Trelawnys have risen 1l., closing at 26 to 27. North Frances closed at 11½, buyers, being a rise of 2l. Wheal Edward closed at 7⅞ to 7¾, being a rise of 10s. The south lode at the shaft is said to be improving in depth, and every fathom sunk on a lode producing 20 to to 24 tons to the fathom for length of the shaft (12 feet) considerably enhances the value of this mine. At Great Wheal Alfred, an improvement having taken place in a winze below the 170, the shares were in demand the early part of the week at 4½, but closed, sellers, at 4¾; at which price they are a cheap speculation. North Bassets have risen 30s. per share, but closed flat at 14½, sellers. West Bassets have risen 30s., closing firm at 24l., buyers. East Russells have been largely dealt in at 3 to 3¼, and from the present prospects of the mine it is not improbable those share will advance very considerably during the present year. Wheal Grenvilles have been in good demand, but there is no disposition on the part of holders to sell at the present low prices. Herodsfoot's have been dealt in at 6¾ to 7. Vale of Towy's at 17s. to 18s., with the prospect of a 1s. dividend at the next meeting: these are cheap shares. Sortridge Consols, as usual, have been largely dealt in at 127s. 6d. to 30s., closing, sellers, at 28s. 9d. It is to be hoped that an improvement will take place in this mine soon, as the reserves are being worked away to keep up the bi-monthly samplings. Virtuous Lady and Wheal Bedford shares have been enquired for, owing to the discoveries that have been made during the week in the ancient workings at the former mine; the present price is 20s. to 25s., and but few sellers. Wheal Bassets have been in good demand at 145 to 155, with an absence of sellers. Tincrofts in good demand at 3¼ to 3½; one of the cheapest mines in the list. St. Day United have been dealt in during the week; it is difficult to account for the nominal low price of these shares; the machinery and plant is estimated to be worth from 10,000l. to 15,000l. The mines are making monthly profits, notwithstanding the present low standard for copper and depressed price of tin. Price of the shares 15s. to 20s. Clijah and Wentworths at 6, with an absence of sellers.

TOLVADDEN MINE.—I recollect, when I was quite a child, sitting in Wheal Neptune office, and hearing the cashier, when the clock struck, say—There is another guinea for Mr. Gundry, or the Messrs. Gundry. This must have been about 1815, for I remember seeing an ox roasted before the office window in celebration of the declaration of peace, and the agents being chaired around the mine by the miners. The workings were from that time continued to the eastward, or out of the influence of the carne, or irrupted granite, that formed the rich and beautiful mixture of grey and yellow ore that constituted the best part of Wheal Neptune. It is true that to the eastward bunches of ore were found at Stephens, Trevelgonis, and Polkinghorne shafts, and although those ores were variegated, and consisted of horseflesh, peacock ore, and all the beautiful and diversified colours of the sulphurets, yet the body or mass of metal was wanting that constituted the bulk of the great formation of the western part of Wheal Neptune. Tolvadden, the mine that is now opening, is under precisely similar influences to the great deposit of Wheal Neptune. The lode is subject to the power which broke up the second carne, in the way from Wheal Neptune to Marazion, and I have no doubt that this body of metal will be similar in most particulars. It is the same lode, under direct geological analogy, and no doubt will yield ore of the same description, and in similar abundance. It is a singular thing that the levels were never pushed on in a westernly direction from this mine, although they were carried upwards of a mile (that is, to Trebarvah) to the eastward. It would seem as if fate had reserved this good thing for the second generation of the discoverers of Great Wheal Neptune, as I know that the gentlemen enjoying the present discovery are relatives of Mr. Gundry, proprietor of the mine 40 years ago. A note this morning (Jan. 5) says, "I never saw in all my life anything like the beautiful bell-metal and grey copper ore now coming up in this mine from a lode 6, 8, and 9 ft. wide, yielding in some places as much as 7 tons of ore to the fm.—M. FRANCIS.

ASHBURTON UNITED MINES.—Notwithstanding the great depression of the money market, we are glad to find that our enterprising friend and correspondent, Mr. Nicholas Ennor, has succeeded in forming a company for re-working these superior mines. A preliminary meeting has been held, and the Devon and Cornwall Banking Company selected as bankers, into which the deposit of 2l. per share is to be paid forthwith. A whim has been erected on the mine, and four tin pitches, set at 12s. 6d. in 1l., the men paying all expenses of raising, dressing, and other charges. There are also other miners waiting to take pitches when the adit has been cleared out. The reason of such valuable tin ground remaining unworked is the mine was not abandoned, but temporarily suspended, to arrange for working it by steam-power; but for reasons set forth in the prospectus it was not again worked by the former proprietors, consequently the present shareholders will have the advantage of the capital laid out by their predecessors. The pumps are now in the mine, in good order and well situated. The first machinery necessary will be the steam-stamps, which can be kept in full work even before the water is in fork.

From the GLASDIR MINE (which has been rather heavy upon the adventurers, owing to the reduction in the standard for copper ore), last month they shipped 45 tons of copper ore, the produce of Oct. month. At present they are conveying from the mine to the shipping port another cargo of the same quantity, produce of Nov., and are now dressing about the same quantity, the produce of December. The metal continues to hold strong in different parts of the mine, and they have lately discovered a new lode, which, in addition to what they have, will in a short time amply repay the adventurers for their patience and perseverance.—K. R.: *Dolgelly.*

GWEEK CONSOLS is capitally situated in a kindly piece of ground. Little has been done. Report says good copper has been found, which, from the respectability of the evidence, is to be believed. We saw many lodes, but no copper; there were indications of it, but not such as to tempt any but the most sanguine or ignorant to prosecute.

ANGARRACK CONSOLS has much improved during the week. The new caunter lode has formed a junction with Eaton's lode, which will produce good work for both lead and copper. The rise in the back is producing copper ore, of good quality, worth 25l. per fm., and improving. The engine and buildings will be finished in about three weeks.

WHEAL EMILY is an ancient copper mine, which has recently been re-opened under good management. The ore is of good quality; 50 tons can be turned out monthly at little cost; and the next sampling will be at least 50 tons. The ore is close upon surface, and easily worked; and the mine will probably, within a few months, be in a dividend-paying state, without further calls, the return of ore and cash in hand being considered sufficient to pay for any machinery that may be required.

GREAT CRINNIS MINES.—It is proposed to form a new company to work these mines, strictly under the Cost-book System, in 6000 shares, deposit 1l. per share. This sum would pay for the mines (4000l.), and a whim-engine (say) 1000l., leaving 1000l. to be applied to assist the labour cost for about three months. Mr. Charles would then recommend a call of 5s. per share, which would assist the cost for four months more, and considers it possible that the 100 fm. level might be extended to the line of the new run of ore ground, discovered in the 80, in about six months. They would have to drive the 100 about 20 fms. further east, communicate Union shaft with that level, and complete the winze from the bottom of the 60 to the rise in the back of the 80. If the new run of ore should increase in value in the same ratio from the bottom of the 80 to the 100 as it has from the top of the rise in the back of the 80 to the bottom of that level, it would be one of the most valuable shoots of ore in the county; it is worth 7l. 10s. per fm. in the top of the rise, about 7 or 8 fms. above the 80, and immediately under it, in the bottom of the level, it is worth 30l. per fm. He thinks, if these works are carried out with vigour, they will soon have a valuable mine.

TREVENEN (near Helston).—Capt. Webb, of the Great Hewas Mines, and a principal proprietor, were here on Tuesday last, and have recommended the suspension (for the present) of all but absolutely necessary works, the state of the money market rendering money difficult to be procured, and shares in calling mines are at present wholly unsaleable.

WHEAL RUBY (Galedea), WHEAL FOSTER (Wendron).—These mines are situated to the east of Porkellis United, in which sett they were originally included, but limited capital, and a much more extensive outlay being required than was at first contemplated, no operations have been commenced, or seem likely to be undertaken by the present party. The celebrity of these mines induced me to make a careful examination of the entire series, and I cannot come to the conclusion that all I have witnessed fully bears out the testimony I had heard concerning them. It is rumoured that if the present party do not intend to work them vigorously the setts will be withdrawn. At the Margery Mine, I was shown a curious manuscript plan of these mines with their neighbours, prepared about 90 years since, attached to a prospectus, as they were prepared to be worked at that time under the title of the Wendron New Consolidated Mines. This curious and valuable document is in the possession of one of the captains of the Margery.

BRONFLOYD MINE (near Aberystwith), is now turning out some capital work, and but for the delay requisite to rebuild the wheel-pit walls (which after erection were found inadequate, from their faulty construction, to carry the heavy 40-feet iron water-wheel), would be now making good and profitable returns.

The demand for certain descriptions of iron ores is so great, that it is probable extensive works will be opened in the parish of Constantine, where large veins of excellent quality are known to exist, and where carriage to the port does not exceed 6d. per ton. Application has been made for an extensive sett by an eminent Welsh firm, to whom it will most probably be granted, as such works will be a great boon to the neighbourhood.

Improvements of importance are reported from both Porkellis United and Wendron Consols; the more these mines are developed the better they appear. Had not tin fallen so much the latter would have continued its dividends, and the former probably been soon in the list of dividend mines; as it is, they must be content to tide over the stream of adversity, and hope for better days.

WHEAL LEWIS MINE is said to be looking remarkably well, the discovery of copper holding on with every prospect of continuance. The tin department is also well spoken of as being better than at any former period.

Report speaks of gold having been found in St. Martin's parish. We purpose visiting the spot, when particulars will be published. If the specimens we have seen be from the place it will be of some importance, particularly now that Mr. Squire has matured his invention for separating the auriferous particles. The gold is said to exist in a lode, as well as in a stream in which tin is found. We have so often been deceived by the cry of "Gold in England" that we are incredulous on the subject; however, *nous verrons.*

ALFRED CONSOLS, EAST ALFRED, &c.—It will be seen by our advertising columns that special reports on these mines, by some of the best practical authorities, will appear in Mr. Murchison's Review, to be published next week.

As a proof of the popularity of Mr. Henwood's Cornish Mine Photographs, we may state that several, including the "Miner's Funeral," the "Bal Boy," &c., are being published in the *Sydney Herald* and the *Adelaide Gazette;* in the *Mexico Extraordinary*, an English Mexican journal, of Nov. 19, the "First Dividend" is re-published; this is also a proof of the extensive circulation of the *Mining Journal.* The *American Mining Journal* frequently copies them, as well as other of our articles. We understand Mr. Henwood intends publishing them, together with the "Mems. of Mines and Miners," the "Christmas Tale," &c., at a cheap rate, for which we doubt not he will have an extensive sale.

Mining Correspondence.

BRITISH MINES.

ABBEY CONSOLS.—J. Trewin, Jan. 5: In cross-cutting in the 10 we have intersected a branch 2 feet wide, producing 7 cwts. of lead ore per fm., and have put the men to drive east on the course of it. The stopes in the back of the adit, west of the engine-shaft, are worth 4 cwts. of lead ore per fm. There is no change to notice in the adit level, west of the eastern shaft; the lode is yielding about 4 cwts. of lead ore per fm. The lode in the adit level, east of the eastern shaft, is producing occasional stones of lead ore. The lode in the eastern shaft is composed of quarts, blende, and lead ore, worth of the latter 6 cwts. per fm. No. 1 stopes are worth about 9 cwts. of lead ore per fm. No. 2 stopes are worth 7 cwts. of lead per fathom. The stopes east of the rise are much the same as for some-time past—producing 5 cwts. of lead ore.

ALFRED CONSOLS.—M. White, T. Trelease, T. Hosking, Jan. 6: The north lode in the 140, east and west of cross-cut, is just as last reported. This lode in the winze sinking under said level is worth from 12l. to 15l. per fathom. This lode in the 130, west of cross-cut, is worth 10l. per fathom. This lode in the winze sinking under said level is worth from 45l. to 50l. per fathom. This lode in the 120, west of cross-cut, is worth 7l. per fathom. The main lode in the 120, east of Davey's engine-shaft, is worth quite 30l. per fathom. This lode in the 110, east of said shaft, is worth 20l. per fathom. This lode, west of No. 2 winze, in said level, is worth 30l. per fathom. The north lode in the 110, east of said shaft, is worth 12l. per fathom. This lode, in the winze sinking below the 100, is worth from 12l. to 14l. per fathom. The north lode in the 70, east of cross-course, is about 1 ft. wide, composed principally of mundic. This lode, west of cross-course, is about 8 in. wide, composed of mundic and spar. All the other parts of the mine are just as reported last.

ANGARRACK CONSOLS.—J. Barratt, Jan. 5: Since my last periodical statement of progress, we have communicated Cox's engine-shaft with the cross-cut by borer hole, and have now about 10 feet more to square to the bottom of the adit. Our adit in this part of the mine will be 25 fathoms deep. We are carrying down ground in the western end of the shaft for set-off, of house water lift; the shaft is divided, cased, and ladder road put in for 22 fms. deep. Our setting took place on the 4th, when Cox's engine-shaft was taken by nine men, at 10l. per fm. A rise in the back of Mellinoweth adit, at the junction of the caunter and Eaton's lodes, by two men and two boys, at 4l. 10s. per fm., and the eastern end, on Eaton's lode, by two men and two boys, at 5l. per fm. In the past week we discovered a lode in Cox's shaft 5 inches wide, bearing east and west, dipping south about 2 feet 6 in. in a fm.; it is composed of quartz, mundic, blende, and gossan; this, with others already discovered in this shaft, will form important intersections with the lodes discovered in Cold Harbour, dipping north, and which must at no great depth pass through the engine-shaft. We have also discovered in the Mellinoweth adit end the new caunter lode which we passed in the cross-cut; it is 8 in. wide, composed of quarts, mundic, blende, lead, and copper ore; the whole of the lode is saving work for lead; its bearing is north-east and south-west, dip south-east, 5 feet in a fathom, and is a promising lode; Eaton's lode, in the same end, is small, producing spots of yellow copper ore, bearing 20° south of east. Eaton's lode in the rise is 12 in. wide of good work for copper, worth 25l. per fm. The engineers have fixed the main beam, cylinder, and boiler, and many other minor parts are in the engine-house ready for erection. The masons are building in boiler, and also building the boiler-house; all the small houses are completed, and I hope in three weeks all the necessary buildings will be finished, and the masons dispensed with. The smith is in operation getting tools and doing the necessary iron work for the engineers. The carpenter is getting around engine-cistern, shears, flooring, &c. Every branch of the work is being executed with all possible dispatch.

— J. Barratt, Jan. 6: The lode is looking well in the back, and likely to turn out a good quantity of ore; it is better than when we commenced to rise; the lead in the back has disappeared, and the lode yields copper ore of good quality.

ASHBURTON UNITED TIN AND COPPER MINES.—W. Hosking, Jan. 5: A whim has been erected on the eastern part of the sett—on Union lode, where thousands of fathoms of tin ground are standing. I have already set five pitches above the adit to 12 men and four boys, at 12s. and 12s. 6d. in 1l., the men paying dressing and other expenses. Other pitches will be let as fast as they progress in clearing the adit. The stamps are working on the halvans as before, and will make profitable returns. The first thing requisite is a steam-stamps: indeed it is necessary even before the pumping-engine is erected.

BALLYMONEEN.—W. Barkla, Jan. 2: The 15, driving east and west, is without any change to notice since I last wrote to you—still good stones of sulphur in both drivings. The 15 east has been driven since last report 3 feet—total driven, 3 fms. 6 in. The 15 west has been driven since last report 3 feet—total driven, 2 fms. 5 ft. 8 in. We are making a little more progress in sinking the winze below the adit level, and I hope will continue to do so, as it is of great importance to get this winze through with all possible speed; sunk since last report 5 ft.—total sunk, 8 fms. 5 ft. 6 in.

BALLYVIRGIN.—D. Macdonald, R. Pellow, Dec. 31: The west cross-cut from the bottom of the engine-shaft has been driven 16 ft., the ground is rather hard for driving, but is showing good veins of calcareous spar, carrying lead and a little copper. A pare of men have been set to stope in the roof of No. 1 stope; it is worth 3½ tons of lead, 1 ton of copper, and 7 tons of mundic per fathom. No. 2 stope is worth 1¼ ton of lead, 1½ ton of copper, and 12 tons of mundic per fathom. No. 3 stope is worth 3 tons of lead, 10 cwts. of copper, and 10 tons of mundic per fathom. We have set a pare of men to stope the ground between the engine and air-shafts, this we shall name No. 4 stope; we cannot name the value of this ground till next report. The cross-cut east towards the new discovery lode has been driven 15 fms.; we have now came upon a breast-head, and hope to have a change in the ground. We have timbered the south level, and commenced to stope the back, which we find is not so rich as reported for copper; it is worth 15 cwts. of copper and 8 tons of mundic per fm. Since last report we have put 3 tons of lead, 2 tons of second crop copper, and 15 tons of mundic to pile, and have prepared for the crusher 5 tons copper and 3 tons lead.

BASSET CONSOLS.—W. Harris, Jan. 2: By driving the 30 end south, on the lead lode, we have discovered a new copper lode in whole ground, composed of black and yellow ore with jack, worth 15l. per fathom; driving by two men and two boys, at 45s. per fm. We are driving west on Wheal Rock copper lode, in the 30; the lode is 5 ft. wide, composed of ore, jack, and peach, with a leader of ore in it 1 ft. wide—all saving work. In the 40, or deep adit, the lead lode in the end is considerably improved in the last 2 fathoms driving; the lode is 18 in. wide—all saving work. Our stopes and pitches are looking exceedingly well, both on the copper and lead lodes. We have this day sampled 6¼ tons of silver-lead ore and 3 cwts. of cobalt, which we shall sell next week.

BEDFORD CONSOLS.—J. Hodge, J. Mitchell, Jan. 7: We continue to drive the adit end east; the lode therein is very similar to that last stated. We still anticipate having a change for the better; the ground has improved, and is now set at 8l., the price in December being 10l. We continue to drive the south end, and shall drive by the side of the lode until next week, when we shall take it down, and should it not prove to our expectations we intend suspending it for a time, when we shall most probably put these men to sink a winze in the end by next week; we shall have 7 feet of the lode to take down. The building of the engine-house has been suspended for a day or two in consequence of the frosty weather, but we hope soon to have a change. The masons will work to-morrow. No other alterations to notice at present.

BEDFORD UNITED.—J. Phillips, Jan. 7: The lode in the 130 east is producing good saving work. In the 115 west the lode is 2 ft. wide, yielding 3 tons of ore per fm. Warne's stopes, in back of this level, will turn out about 4½ tons of ore per fm. Paull's stopes, in bottom of the 115 east, will yield about 4 tons of ore per fm. Huggins's stopes, in the bottom of the same level, will yield full 5 tons of ore per fathom. There is nothing new to report in any other part of the mine.

BODCOLL.—F. Evans, Jan. 4: The 10 west is driving through a large, promising lode; driven last week 2 ft. Evans's shaft was sunk last week 1½ ft., ground moderate for sinking, but water a little increased. We are getting on with the workings as fast as circumstances will allow.

BOILING WELL.—J. Delbridge, Jan. 2: The rise against King's shaft, from the 60, is not holed as yet; we expect 6 ft. more through. In the 50, east of King's, the lode is 9 in. wide, stones of lead, not to value. In the 40, on the south part of the lode, west of Austin's, the lode is 3 feet wide, stones of ore, blende, and lead ore. In the 40, east of Austin's, the lode is 9 in. wide, stones of copper ore. In the 30, east of Austin's, the lode is small; this does not appear to be the main part of the lode. In the 20, east of Syrett's, the lode is 2 ft. wide, stones of blende, copper, and lead ores—tribute ground. In the 20, east of Syrett's, the lode is 20 in. wide, yielding some good copper ore, and the lode more kindly to yield copper than lead. At Fielding's shaft the lode is from 20 in. to 2 ft. wide, yielding stones of lead and spots of copper ore. The lode at the shaft below the 12 is split, but has a kindly appearance. Our tribute is without change to notice.

BRONFLOYD.—M. Barbary, Jan. 6: The south part of the south lode, which we are rising upon in back of deep adit, is looking well for the whole breadth of the rise, and will on an average yield from ⅛ to ¼ ton of ore per fm. We have cut into the south lode in the 17, south of No. 2 shaft, for about 6 ft., with a fair mixture of ore in the present end; and for as much as we have yet seen of the lode at this level its general appearance is very encouraging, but the part of the lode we are rising upon from the level below is, I consider, still from 2 to 3 fms. further south, this forms an encouraging feature. We are proceeding with surface operations as fast as possible.

BRYNTAIL.—J. Roach: The 10 driving east of No. 2 cross-cut, on north part of Bryntail lode, has during the last few days much improved in appearance; the forebreast, which is now 3½ ft. wide, contains stones of ore, and a mixture of the latter throughout. The winze under the 10, on the south part of the lode, has been sunk in the past week 3 ft. vertical; 3 ft. more will intersect the orey part of the lode in the level: probably I shall be enabled to give you satisfactory information regarding this point next week.

BWLCH CONSOLS.—R. Northey, Jan. 5: I have nothing new to report, except that the lode in the 40, at the old mine, is 2 ft. wide, and producing good stones of lead. I will write to you again in the middle part of next week.

— R. Northey, Jan. 6: The lode in the 40, in the old mine, is 3 ft. wide, with well-defined walls, and good stones of lead, it is a very strong and kindly-looking lode. Nothing new at Pullthrynaid for the week, we have been deterred drawing, crushing, and dressing for the last two days, the frost having stopped the water-wheel. I have nearly 30 tons of ore in the storehouse. I hope the weather will change shortly, so as to get as much as possible for the next sampling.

CAMBORNE CONSOLS.—W. Roberts, Jan. 5: The following bargains were re-set on Friday last:—The 50 to drive east from Wheal Gons cross-cut, by six men, at 16l. per fm.; lode about 1 ft. wide, unproductive. The 20 west by four men, at 6l. 10s. per fm.; lode 2 feet wide, containing mundic and occasional stones of ore. The 10 west by four men, at 3l. 5s. per fm.; lode 1½ foot wide, unproductive. A winze to sink under the adit, by four men, at 3l. 5s. per fm.; lode small. The tribute pitches in the back of the 20 and 10 fm. levels are looking well. We expect the next sampling will be a tolerably good one.

CARADON CONSOLS.—W. Rich, Jan. 5: We are driving the 38 cross-cut south, with six men, as fast as possible; the end of this cross-cut shows granite and elvan intermixed, which is an indication that the south side of the elvan will very soon be reached. In the past few days we have seen some small strings of good ore dipping south; this looks kindly, and to-day we have a small stream of water coming from the end; I think we are getting near a lode. The north lode mentioned in my last we are opening on in the 35; I consider it advisable to give it a trial east of the cross-course, as it now shows spots of ore, and some kindly-looking fluor-spar. The lode at the boundary shaft is going down nearly perpendicular, and, although at present small, it shows spots of good yellow ore.

CARVANNALL.—W. Roberts, Jan. 5: The following bargains were set on Wednesday last:—The 130 to drive west, by six men, at 4l. per fm.; lode 3 ft. wide, composed of mundic and crystallised iron. The 118 west by two men, at 3l. 10s. per fm.; lode small. In the 106 the lode is 2 ft. wide, producing ⅛ ton of ore per fm.; driving

by two men, at 3l. 10s. per fm. The 86 west by six men, at 4l. 10s. per fm.; lode at present small and unproductive. The 76 west by four men, at 3l. per fm.; lode 2 ft. wide, producing good stones of ore.

CASTELL.—J. Lester, Jan. 4: The last parcel of blende has been shipped, and we have begun to take down another. There is no alteration in the lode. We have got the round buddle at work to dress the slimes. We have at this time 16 tons of blende dressed, part of which is at Aberystwith; we should have had 25 tons by the time I mentioned had we not have been stopped yesterday by frost. The blende is looking much the same as it did at the commencement. Should the weather prove favourable, and we had plenty of water, we could get from 20 to 25 tons per month for some time. Every wheel in the neighbourhood is stopped by frost.

CATHERINE AND JANE CONSOLS.—R. Harry: In the deep adit end there is no change to notice since last report. The lode in the stopes, south-east of No. 2 winze, is 2 ft. wide, producing about 6 cwts. of ore per fm. The lode in the stopes north-west of No. 2 winze is become unproductive; I have in consequence put two of the men to rise and stope in the cross branch, south-east of No. 2 winze; the lode is 2½ ft. wide, yielding from 6 to 7 cwts. of good quality lead ore per fm. The other two men from the north-west stopes are at present rising in the back of the deep adit level north-west of No. 3 winze; the lode is 10 in. wide, worth for 6 ft. in length 4 cwts. of ore per fm. The lode in the stopes south-east of No. 3 winze is 2 ft. wide, producing 6 cwts. of lead ore per fm., with an improving appearance. Our dressing operations are progressing well.

CEFN CWM BRWYNO.—Jan. 5: The lode in the 80 fm. level, south from Taylor's shaft, is now cut through by the cross-cut; it is 12 ft. wide, composed of spar, carbonate of lime, and clay-slate, intermixed throughout with small strings of lead ore. We have now commenced to drive west of the cross-cut on the north part of the lode, and the part we are now driving, or for the width of the end, is yielding 10 cwts. of lead ore per fm. The lode in the 60 fm. level, west of Taylor's shaft, is 4 ft. wide, and at present yielding 1 ton of lead ore per fm. The lode in the stope over this level, 40 fms. west of shaft, is 9 ft. wide, producing 15 cwts. of ore per fm. The stope over this level, 20 fms. west of shaft, is producing 12 cwts. of ore per fm. The lode in the stope over the same level, 10 fms. east of shaft, is 4 ft. wide, yielding about 14 cwts. of ore per fm., and about 10 cwts. of blende. The stope over the 56 fm. level, 15 fms. east of Taylor's shaft, is producing 8 cwts. of ore per fm. The lode in the stope over this level, 60 fms. west of shaft, is 10 ft. wide, and at present yielding 10 cwts. of lead ore per fm. The lode in the stope in the bottom of the 44 fm. level, 40 fms. west of Taylor's shaft, is 3 ft. wide, yielding 10 cwts. of ore per fm. The lode in the 44 fm. level, driving west of the slide, 80 fms. west of Taylor's shaft, is 4 ft. wide, with a promising appearance, now yielding 15 cwts. of ore per fm.; this level is being pushed on by four men. The lode in the stope over this level, 25 fms. west of shaft, is 3 ft. wide, and at present yielding 8 cwts. of lead ore per fm. The lode in the stope over the same level, 25 fms. east of shaft, is 4 ft. wide, yielding 15 cwts. of ore per fm. The lode in the 56 fm. level, driving east of Taylor's shaft, is 3 ft. wide, composed of spar, blende, and clay-slate, with a little ore at times, but not to value; this level is being driven by four men, and will be pushed on with all speed, in order to prove the runs of ore ground gone down in the bottom of the 20 fm. level. The cross-cut north in the 20 fm. level, 4 fms. east of Taylor's shaft, is progressing favourably, and there is still a good deal of water coming out of the present end; there is no lode intersected as yet, but I do not think we have got far to drive to intersect the lode. All other things underground in the mine are going on regular, but our dressing department is idle by means of the frost. We sampled 70 tons of ore from this mine to-day, which I hope will bring a pretty good price.

CLIJAH AND WENTWORTH.—C. Glasson, Jan. 4: We have cut Wentworth lode in the 80 fm. level cross-cut, north of Walters's engine-shaft, and opened on it about 10 fms. east and west of the cross-cut; it has a very promising appearance, and occasionally producing rich stones of coppor ore. There is no alteration in the cross-cut south of this level since our last. In the 70, on Wentworth lode, driving east of Walters's engine-shaft, the lode presents a very promising appearance, worth 10l. per fm. In the 70, on Wentworth lode, driving west of Walters's engine-shaft, the lode is 3 ft. wide, at present unproductive. In the 50, on Julia lode, driving west of Mary Ann cross-course, the lode is 1 ft. wide, producing good stones of ore. In the 30 fm. level, on Julia lode, driving west of Mary Ann cross-course, the lode at present is small and poor.

COLLACOMBE.—S. Mitchell, Jan. 5: During the last week Morris's engine-shaft has been sunk 3 ft. below the 72, and the ground is favourable for progress. The 62, west of the western shaft, has been driven 5 ft., and the lode worth about 1½ ton of good ore per fm. The rise in the back of the 50, west of the western shaft, has been put up 5 ft., and the lode is worth 1 ton of ore per fm. Other points continue as last reported on. We sampled about 135 tons of good quality ore on Tuesday last.

COLLEGE.—A. Braithwaite, B. Tucker, Jan. 2: The tribute pitches are not looking quite so well as last reported. We have about 15 cwts. of lead in store, and hope in our next report to make a much better return.

CROSSGILL HEAD.—G. Millican, Jan. 2: The stope east of the sump is very good; it will yield at the least 3 bings of ore to the fathom; west of the sump is very poor. There is no alteration with the sump in the scar limestone.

DALE.—R. Ninnes, Jan. 7: The stopes on the pipe vein, below the 32, are still yielding good ore. The tribute pitches continue much the same as last reported.

DEVON AND CORNWALL UNITED.—T. Neil, Jan. 5: The ground in the 40 continues much the same in character as for the past two or three weeks. In Bastard's level, driving east, no lode has been taken down for the past week; the water is issuing strongly from the end, with every indication of a productive lode. The stope in the back of this level, west of rise, on the north lode, is worth 8 tons of ore per fathom.—Midway: In the eastern level the lode is larger, and producing good stones of ore. In the western level the lode is 6 feet wide, worth 6 tons of ore per fathom.—South Lode: In the winze in the bottom of this level the lode is 6 ft. wide, worth 2½ tons per fathom. In the stope in the back of this level, west of rise, the lode is worth 12 tons per fathom. The lode in the winze sinking in the bottom of this level is improved, worth 3 tons of ore per fathom. No lode as yet been taken down in the eastern level, but will be in time for next report. In William and Mary adit level the lode is 2 feet wide, and producing some very good stones of ore, looking promising for improvement.

DEVON BULLER.—T. Neill, Jan. 7: In the 56 the cross-cut south towards the south lode is driven 2 fathoms, and in this driving we have intersected the south part of the old lode, and which I think is the main part of it, being 3 ft. wide, composed of flookan, spar, and spots of ore. We shall at once commence driving west on this, as the ground is much easier for progress than on the north. In the 44 west the lode is 3 feet wide, producing saving work for copper ore; a very promising lode. In the rise in the back of this level the lode is 2 feet wide, producing saving work for copper ore. In the stope in the bottom of the 32 the lode is worth 2 tons of ore per fm. The pitches are producing fair quantities of ore.

DEVON BURRA BURRA.—J. Lord, Jan. 7: The ground in the engine-shaft is of the same character as last reported—easy for sinking; the lode is going down more perpendicularly, and in places showing good spots of grey ore. We are making fair progress in driving the 40 east. We have not yet intersected the cross-course, but expect to do so every hour, and we have no doubt that when this is effected White's shaft will be unwatered.

EAST CARN BREA.—T. Glanville, Jan. 6: We hope to complete the walls of the engine-house this week. The lode in the adit level, east of engine-shaft, is 2 ft. wide composed of gossan and stones of ore.

EAST DAREN.—Jan. 5: We have this day sampled 90 tons of lead ore. All our machinery is now at a stand-still, in consequence of the severe frost which is just set in. Our levels and all other points throughout the mine are much as last reported.

EAST ROSEWARNE.—J. Delbridge, Jan. 2: In the past month the sumpmen have sunk the engine-shaft 1 fm. 1 ft., fixed bearers, and put in cistern, and the same pare have taken to drive west on the lode in the 33, below the adit, by six men. In the 33 east the lode is from 20 in. to 2 ft. wide, yielding stones of good copper ore. In the 22, east of engine-shaft, the lode is 9 in. wide, unproductive. In the 22, west of King's shaft, we are driving a cross-cut towards the north lode, we expect in about 3 or 4 fms. to cut the lode; the ground is favourable for driving. In the 22 east, on the north lode, the lode is from 9 in. to 1½ ft. wide, opening in tribute ground. In the 22 west, on the same lode, the lode is disordered, yielding stones of ore, at present not to value. In the winze sinking below the 12, on the north lode, the lode is 9 in. wide, yielding some good stones of ore; the ground is likely to work on tribute. In the 12, east of King's, the lode seems to be improving; in the past week it has yielded some good stones of copper ore. At King's shaft the ground is rather hard; sunk about 8½ fathoms below the 12. In the adit cross-cut no lode has been met with to notice; we calculate about 4 fms. more will meet the lode we intend cutting. We intend fixing the 14-in. lift in a few days. Other things are without change to notice. Our setting and pay went off well.

EAST WHEAL FALMOUTH.—W. Burrows, Jan. 6: The sumpmen are still driving the cross-cut west in the 30 fm. level, without any alteration to notice since my report last week. The 20 end north, on Chennall's lode, is worth 2¼ tons of silver-lead ore per fm. Northey's stopes in the back of this level are also worth 2¼ tons of silver-lead ore per fm.; and Deeble's stopes in the back of the same level, on the old lode, are worth 18 cwts. of silver-lead ore per fm.

EAST WHEAL ROBERT.—E. Collom, Jan. 4: There is nothing new to report. The ground has turned out to be very hard, so that we have not yet arrived at the lode we are aiming at.

EAST WHEAL RUSSELL.—J. Goldsworthy, Jan. 1: I do not see any change in any part of the mine to notice since last reported on.

— John Goldsworthy, Jan. 7: The ground in the 88 is rather hard at present. I should say by the dip of the ground in the 66 we may expect a good change of ground in the 88 in 5 or 8 fathoms more driving. In the 66, east of Homeraham's shaft, the lode in the end is poor at present, rather split up into branches, but I should say we may expect something good in this end again when the lode becomes more settled, which I expect will be in 3 or 4 fathoms driving, by the appearance of the branches, as they are coming together. The stopes east of Williams's winze is worth 2¼ tons of good quality copper ore per fathom. The lode in the winze sinking in the bottom of the 55 is poor at present, but has a more kindly appearance than when we commenced to sink. The tribute pitch in the bottom of the 55 is worth 2 tons of good ore per fm. Nothing new in any other part of the mine.

EAST WHEAL TOLGUS.—Redruth Consols Lode: The lode in the 46, driving east from the engine-shaft, is small and poor. The lode in the 34, driving east from the engine-shaft, is 8 in. wide, producing occasional stones of ore, and letting out a quantity of water. The lode has not been taken down in the 22, driving east from engine-shaft, during the past week. The lode in the stope in the west end of the winze, in the bottom of the 12, is 18 in wide, yielding 2 tons of ore per fm. The lode in the 12, driving east from the engine-shaft, is 3 ft. wide, producing stones of ore. The ground in the rise in the back of the 12, east of the engine-shaft, is just as when last reported—rather hard, and letting out a quantity of water; the lode has not been taken down since last reported. We have put two men to stope in the back of the 12—lode not taken down yet.—North Lode: The lode in the adit end, driving east from the engine-shaft, is 1 ft. wide, consisting of soft spar and prian. The ground in the 12 cross-cut, driving south, is hard—just as when last reported.

EXMOUTH.—J. Hampton, W. Skewis, N. Paull, Jan. 6: In the 60 north, the lode, which we are now driving on is 2½ ft. wide, presenting a very kindly appearance, but not quite so good for lead as last reported; about 2 fms. behind this end we have put two men to cross-cut east to intersect the eastern lode, and from the appearance this lode presented when cut through in Porter's cross-cut, we are of opinion that the result will be good; the cross-cut west is at present suspended, and the men are employed in the rise to effect a more speedy communication from the 60 to the 40. The lode in the 40 north has been taken down to-day, and is worth about 8 cwts. of lead ore per fm., with every prospect of further improvement; the rise in the back of this level we expect will be communicated to the 30 by the end of this week, when this is accomplished we shall have laid open a good piece of ore ground; in the cross-cut east we have not yet cut anything fresh to report on; the stopes in the back of this level vary from 10 to 20 cwts. per fm. The stopes in the 30 are improved, and worth 1¼ ton per fm. The 30 north, on the western lode, is at present worth ¼ ton of lead ore per fm.; the lode in south end, in same level, is a little disordered and not quite so good for lead, but from the character of the ground we believe this change will be of short duration. The lode in the 10 south is 1½ ft. wide, producing some good stones of lead; the cross-cut east in this level north has intersected the quartzose lode, which is leady, producing ¼ ton per fm.; the cross-cut west has not yet reached the western lode. The adit cross-cut west, in the south part of the mine, is still in soft mineralised ground, but no lode has yet been cut; the rise in the back of adit is still in a gossan lode of a softer character. The cross-cut east 12 fms. above the adit level has intersected one of the eastern lodes, which will let at a moderate tribute. The pitches on the whole, and the mine throughout, are looking a little better than last week. We sample to-morrow (Thursday), 100 tons of crop lead ore.

GARREG.—John Trevethan, Jan. 4: The cross-cut from the engine-shaft, driving towards the north lode, has been for the last 4 fms. in an east and west lode, evidently the one that produced such large quantities of lead in the 40 and above during the old company's time. The extreme width of this lode has rather surprised us, but this day I have been convinced that it was caused through the interference with a strong north and south lode forming a junction with the east and west, and which lode was never before seen in this sett. It is of such a character that in my opinion it will considerably enhance the value of this property, as we have it for 60 fms. in depth, and a mile, or thereabouts, on its course south; north it runs into the Whitford sett. It is composed of limestone, carbonate of lime, and clay, with beautiful stones of lead ore, specimens of which, with a little matrix, I will forward by a train to-morrow to your office, which I broke myself in a few minutes with a pick. I would now propose for the future working of this mine a level being driven west on the course of the east and west lode, where after a few fathoms driving I have every reason to believe, from the appearances of the lode in the 40, that it will be of its regular bearing size—from 3 to 5 ft. wide; also a level to be extended south on the new lode this day intersected. Any further change, which from appearances are expected, I will advise you of.

GAWTON COPPER.—John Gill, Jan. 6: In the 50 no lode has been taken down since last reported. The lode in the 36 end west is worth 10l. per fm., and very promising for improvement. The stope in the bottom of the 24 is worth 12l. per fm. The stope in the back of the 36 is worth 20l. per fm.

GOGINAN.—The lode in the 60 or deep adit level, east of Bryn-pica shaft, is 3 ft. wide, composed of spar, blende, and clay-slate, intermixed throughout with small strings of lead ore, but not to value; at this point I have put the men to drive a short cross-cut south near the present end in order to prove whether there may not be still a better part of the lode standing in the south side of the level, as there is a great quantity of water coming out of the south side of the level for a great many fathoms in length; the two cross-cuts in this level—one north and the other south—are progressing as fast as possible, but the ground is rather hard; nothing of importance has been intersected in either of these cross-cuts as yet, but there are some small strings still seen crossing the south cross-cut near the present end, which contain small particles of lead ore, and are letting out a good deal of water. The tribute pitches in the back of the 60, west of the Bryn-pica shaft—four in number—are looking much as usual, yielding on an average about 13 cwts. of lead ore per fm. The lode in the stope in the bottom of the 120 fm. level, 80 fms. west of Francis's shaft, is 3 ft. wide, and will yield at present about 1 ton 5 cwts. of lead ore per fm., but the ground is very hard and the water very quick, so that the progress in sinking and stoping is but slow; still I can make the thing pay pretty well, and we are still proving the lode a little as we go down. The lode in the 55, east of the cross-cut south from the boundary shaft, on the south lode, is 3 ft. wide, producing good stones of lead ore at times, and is looking more promising than it has for some time past; this end is being pushed on as fast as possible, by four men. The cross-cut south in the 55, from the south lode, south of the boundary shaft, is progressing favourably (by six men) towards the south lode. The lode in the 30, west of the cross-cut, north from the boundary shaft, which is on the north or main Bwlch lode, is 4 ft. wide, yielding 15 cwts. of lead ore per fm.; the lode at this point is improved within the last few days, and I think we are likely to have some pretty good ground back in that direction, as there is some ore ground dipped westward from the Bwlch Mine in these upper levels, and by driving back a few fathoms we shall soon prove it; this level is worked by two men, at 5l. per fm. The tribute pitches in the old part of the mine are looking much as usual, but several of them are working out fast, but everything shall be let and worked throughout the mine that will pay for working, and every point carried out with all speed. We have gone into the cost, &c., and by reducing the men a little and the dressing people, smiths, and carpenters, &c., we shall reduce the cost not less than 38l. per month, and we think a little more can be done after a short time, which shall be attended to, and everything shall be done to keep it down. We hope to sample 30 tons of ore again from this mine on Tuesday next, which will come in this year's returns, if the weather does not hinder us much; but we are all at a stand-still here to-day, every wheel throughout the mine being completely frozen up: last night we had as severe frost as has been seen here for some years, but we hope it will not last long. We shall sample at the time appointed, if possible, if the weather changes so that we can get the ore in, but as it is a great many of the small lots of tributers' ore take some time to get dressed.—Jan. 5.

GREAT CRINNIS.—E. Shaw, W. Woolcock, Jan. 4: The 80 stopes east of Union shaft are estimated at 6l. per fm. We have one pitch working west of Cornish's shaft, in the 24, valued at 7l. 10s. per fm.; two pitches working west of old sump-shaft, in the 17 and 24 fm. levels, valued at 5l. 10s. per fm.; two pitches working east and west of Catherine's shaft, in the 31, and valued at 3l. 15s. per fm.; one pitch working east of Hannah's shaft, on the middle lode, and valued at 5l. per fm.; and four pitches working east of Daniel's shaft, in the 10, 20, and 30 fm. levels, valued at an average of 3l. 5s. per fm.

GREAT SHEBA CONSOLS.—J. Spargo, Jan. 6: The lode in the back of the 40 is turning out a good quantity of ore, and is likely to continue. We have now commenced stoping in the bottom of the 40, and next week hope to be able to report the value of the lode in this part. The other work in the mine, as well as that at Kelly Hole, is going on very satisfactorily.

GREAT SOUTH TOLGUS.—John Daw, Jan. 6: The lode in the 80, west of new shaft, is much the same as last reported, producing 1 ton of copper ore per fathom. Nothing has been done in the 60 on the south part, the men being employed at capstan. In the 40 the lode is 1½ ft. wide, producing 3 tons per fm.; the rise in back of this level is producing 2 tons per fm. In the 30 the lode is 2 ft. wide, producing 2 tons per fm. In the 70 cross-cut, north of new shaft, we have cut a lode from which we have broken some good stones of ore. We are still in the cross-course, and cannot ascertain its value for a few days.

GREAT TREGUNE CONSOLS.—J. Spargo: We shall finish the plat in the 60 this week: we have ore coming in the lode in the 60, and nearly through the branch of peach mentioned in my last report, that somewhat disordered the lode, and I hope by another week we shall meet with a far greater improvement. The ore in course of dressing is of superior quality to that last sold.

GREAT WEST SORTRIDGE.—J. Richards, Jan. 7: In the 50, west of the engine-shaft, the lode is composed of an abundance of mundic, capel, quartz, and occasionally a little ore.

GREAT WHEAL ALFRED.—M. W. Michell, W. Bagelhole, Jan. 4: The lode in the 180, west of Copper-house shaft, is 4 ft. wide, worth 10l. per fm. The lode in the winze sinking below the 170, 6 fathoms west of the 180 end, is very much improved—3 ft. of the north part is worth fully 25l. per fm.; we have from 2 to 3 ft. still standing to the south, which is also orey. Our object for carrying only a part of the lode is to communicate with the 180 as soon as possible. The lode in the 170 is disordered by the flookan, but still producing stones of good copper ore. In the 160 west, on the south part, the lode is 18 in. wide, worth 5l. per fm. We calculate to get Copper-house engine ready for working by Saturday next, Dec. 9. Our tribute department is without alteration.

GREAT WHEAL BADDERN.—J. Jenkin, Jan. 5: In the 61 fm. level the lode is 8 in. wide, producing about ⅛ ton of lead ore per fm.; the elvan still continues hard for driving. In the No. 5 winze, sinking below the 51, the lode is 18 in. wide, yielding 1½ ton per fm. In the stopes east of No. 5 winze the lode is 15 in. wide, turning out 1 ton per fm.; elvan very hard. In the 51 end east the lode is 8 in. wide, producing about 5 cwts. per fm. In the stopes in the back of the 51, behind the end, the lode is 9 in. wide, yielding 8 cwts. lead ore per fm. In the winze sinking below the 30, lode poor at present. Our surface operations are progressing satisfactorily.

GREAT WHEAL FORTUNE.—J. Daniel, R. Pryor, Jan. 6: The 85 is driven west of the cross-cut, on the main lode, 2 fms.; last 6 ft. driven the water has powerfully increased, with better indications for an improvement of the lode. The 70 is driven south of the main lode 28 fms.; the ground in this end is a little easier for driving. Carnuneal engine-shaft is drained of water, cleared, and secured 1½ fm. below the 10. Our operations in forking the old mine have not been so extensively carried out as was anticipated, in consequence of the unusual size of the shaft, which is now becoming smaller. The 10 is clear of stuff 20 fathoms east of the engine-shaft, the back of which is supported by stull timber; the lode nearly all taken away by the former workers. The deep adit level is cleared on the course of the lode 30 fms. east of the engine-shaft, the back of which is extensively wrought on. The tribute department consists of 30 pitches, employing 90 men, at tributes varying from 6s. 8d. to 14s. in 1l., at a given standard of 50l. per ton for tin.

HAWKMOOR.—J. Richards, Jan. 4: The lode at the engine-shaft is still very regular, producing good stones of ore, and has increased in size at the western end of the shaft this past week. In the 50, west of the great cross-course, the lode is 2 feet wide, but is not so rich for copper in the present end as last reported. No change in the adit end to notice.

HOLMBUSH.—The lode in the 145 west is letting out more water than for some time past, and the ground is easier for driving, but is not yet producing any ore; in the 145 west, on the south copper branch, the lode continues to yield 1 ton of ore per fm.; in the 145 south, on the lead lode, the men are still driving by the side of the lode, there being too much water issuing to drive on it. In the 160, east of diagonal, the lode continues to produce 2 tons of ore per fm. The lode in the stopes in the back of this level, both east and west of Lemon's winze, will yield 1¼ ton of ore per fm. In the 160, west of diagonal, the men are driving through the great cross-course, which at present is hard and wet. The lode in the rise in the back of this level will produce 1 ton of ore per fm., of very good quality. The winze sinking below the 145, east of diagonal, is not yet deep enough to take the lode to the south part of it; it is expected to meet with it in 1 or 2 fms. further sinking. In the 145 west, on the flapjack, the lode is 1 ft. wide, composed of mundic, spotted on the lead lode; this end is still being pushed on south towards the lead-producing ground gone down in the level above with all possible dispatch. In the 124 cross-cut, north of Wall's, though no lode as yet has been met with, the various changes in the ground denote that we are in the vicinity of a lode, and at no great distance from it.

KELLY BRAY.—S. James, Jan. 2: This being our setting-day, the following bargains were set:—The 135 to drive east by six men, at 10l. 10s. per fm., 2 fms. stent, in which the lode is 1 ft. wide, composed of quartz, mundic, and spots of copper ore. The 45 to drive west by six men, at 7l. 10s. per fathom, 2 fms. stent; here the lode is 2½ ft. wide, composed of capel, quartz, fluor-spar, and stones of ore, and we are expecting an improvement daily. The winze in bottom of the 35 west is set to four men, at 3l. 15s. per fm., 3 fms. stent; the lode is 2½ ft. wide, worth 20l. per fathom; this winze has been sunk upwards of 7 fms., through the branch of ore. The stopes in the back of the 35 west is set to two men, at 12. per fathom, 6 fms. stent; the lode is worth 6l. per fm. We have seven pitches working, at an average tribute of 12s. in 1l. There is none of the new discoveries set on tribute.—Eastern Mine: Watson's engine-shaft has been sunk 1 fm. 2 ft. below the 40, sufficiently deep enough to fix our lift, after which we intend to commence sinking for a 50 fm. level with all possible speed. The cross-cut is set to six men, at 6l. 5s. per fathom, one month stent; it was driven during the past month 4 fms. 3 ft. We weighed off Nov. ore on Dec. 29, which was 111 tons 10 cwts. 2 qrs., and sampled 110 tons of ore, computed, for Dec.

KESWICK.—J. Postlethwaite, Jan. 2: The 30 end is at present unproductive, but is a strong lode, and I have no doubt we shall soon meet with ore in this direction. The 40 end is worth 15 cwts. of ore per fm., with every appearance of its continuing; there is a large stream of water flowing from the end. The wet season has greatly increased our water, which has caused some inconvenience, but I hope it will subside to some extent before long. The stopes in the 30 produce as follows:—Smith's No. 1, 8 cwts.; No. 2, 6 cwts.; No. 3, 10 cwts. to the fathom. Bewshee's stopes: No. 1, 10 cwts.; No. 2, 10 cwts. to the fathom. Graham's stopes—12 cwts. to the fm. In the 40, Dixon's rise and stope produce 10 cwts. to the fathom. Michell's stopes: No. 1, produces 12 cwts., and No 2, 6 cwts. to the fathom. In the 40 south the stope is worth 8 cwts. to the fm. The water has been in the 30, and, therefore, no report.

LACKAMORE.—Jan. 4: I have set the following pitches for Jan. and Feb. months:—A pitch in the back of the 10, east of engine-shaft, to four men, at 4l. 15s. per ton. A pitch over the adit level, east of Kelly's shaft, to two men, at 4l. 15s. per ton. A pitch over the adit, east of Bryan's shaft, on south lode, to two men, at 4l. 5s. per ton. A pitch west of Bryan's shaft, to two men, at 4l. 15s. per ton; and a pitch also west of Bryan's shaft, on the north lode, by two men, at 4l. 10s. per ton. The tributers up to the time of setting had been working six weeks, and I estimate the total quantity of ore raised to be 10 tons; I should think, upon an average, worth 9l. per ton. The pitches are just the same in appearance as when I set them before. We have no tutwork bargains yet set, nor any pitches below the 10, as we have not yet properly cleared any of the levels below that depth. But I am glad to say that our drawing machine is now completed, and we make a trial of it to-day for the first time. In the past week we have been engaged in making an underhand, or tip-plat, in the 24, in order to discharge the stuff with greater speed. I am thinking that we shall have a great deal of stuff to come away in this level, and that it would be to our benefit to put in a tram-road for about 50 fms. in length, to save the cost of wheeling.

LADY BERTHA.—James Mothercill, Jan. 7: Our mine is looking very well. The plat in the 30 fathom level is nearly completed. There is no change to notice in either of the levels in the 30. The 20 fm. level west is not quite so valuable, now worth about 1¼ ton per fm. The winze in bottom of the 20 is suspended, the water being so quick. The rise in back of the same level is up about 6 ft., the lode as far as seen is worth 2 tons per fm. The rise in back of the same level east is improved, being now about 9 ft., and worth full 3 tons per fm. Nothing else new.

LEWIS.—W. Bishop, W. W. Martyn, Jan. 6: We have nothing new to report of since our last. The 110 fm. level, east of skip shaft, still continues to produce ½ ton of black tin to the fathom.

LLANDUDNO.—Jan. 4: The cross-cut west of Vivian's shaft is driven 38 yards 1 ft.; there is no alteration in the ground to notice yet, but as our first calculation was that there would be about 40 yards to drive to the strings, and we have not seen any reason to alter that opinion, we expect to meet them very soon. The promising ground we have had for the last 18 yards driving still continues—that is, cavities, with strong crystals of copper pyrites in them. The four men removed last month from the east cross-cut have been opening the south side of the west cross-cut, making it larger to hasten the driving, and they will now make a little trial in the bottom of the level to open to the next bed below, the ground being most promising in the bottom. The 80 yard level, south of the shaft, is without alteration; there are occasionally good specimens of carbonate and other mixed ores of copper, but nothing to value. The rise in the 56 yard level south, by two men, has passed through the shale bed, and it shows a few spots of ore in the bed above it; we intend to rise a little further. The 56 yard level north has not been looking so well as formerly, and we have thought it best to suspend it for the present. At Treweske's, the stopes are looking much the same as for some time past, and are set to the same number of men, at the old price—47s. 6d. per ton. The carriage and freights are taken for six months, at the old prices.

MOLLAND.—T. Bennets, Jan. 6: In the stopes in the back of the 20 east we have a kindly lode, carrying a small leader of yellow copper ore, worth 6l. per fm. The shaftmen are making good progress in cutting down the shaft, and, with good speed, they will, I hope, get down to the 20 in six or seven weeks more. I am glad to say the engine works very well now in pumping water and drawing stuff together. The ore which we now have at surface I estimate to be 10 tons dressed, and 2 tons undressed, besides 3 tons underground, which will be drawn to surface the latter part of this week, if all be well.

NANTEOS AND PENRHIW.—H. Boundy, Jan. 5: Last Saturday being our setting-day, the following bargains were set:—The 20 to drive east of Penrhiw, by four men, 2 fathoms, at 7l. per fathom; the lode is very hard and wet in this end, composed principally of spar, mundic, and a small mixture of lead ore. To stope in the back of the 20, west of Penrhiw, by four men, at 1l. 13s. per fathom; the lode yields 8 cwts. of ore per fathom. New stope, in back of ditto, by four men, at 2l. per fm.; the lode yields 9 cwts. ore per fm. To stope in the bottom of the 10, east of winze, by two men, at 2l. per fathom; the lode yields 7 cwts. ore per fathom. To stope in back of this level, by four men, at 2l. 10s. per fathom. To stope in back of ditto, by four men, at 2l. 5s. per fathom; the lode in these two stopes yield from 15 to 20 cwts. ore per fathom. The 10 to drive west, by two men, at 4l. per fathom; the lode in this end yields 6 cwts. ore per fathom. To stope in the back of adit, by four men, at 2l. 5s. per fathom; the lode yields 7 cwts. ore per fathom. The 36 to drive east, by two men, at 3l. 10s. per fathom; the lode yields 6 cwts. ore per fathom. To sink below the 30, by two men, at 5l. per fathom; the lode yielding a little saving stuff. To stope in the back of this level, by six men, at 2l. per fathom; the lode yields 12 cwts. ore per fathom. To stope in the bottom of the 26, by two men, at 1l. 15s. per fathom; the lode yields 8 cwts. ore per fathom. To stope in the high back, by four men, at 1l. 12s. 6d. per fathom; the lode yields 15 cwts. ore per fathom. The cross-cut to drive north on Bwlch Gwyn, by two men, at 4l. 15s. per fathom. The cross-cut at Eystumtean, by two men, at 5l. per fathom. The frost has set in with such severity as not only to freeze up our water-wheels, but also to stop the whole of our dressing operations. All the bargains in the 20 fathom level are now idle, in consequence of the water being in.

NETHER HEARTH.—Wm. Vipond, Dec. 28: The level forehead is a good deal harder at present than it has been lately; set to four men, at 72s. 6d. per fm. The drift is worth 10 cwts. of ore per fm.; set to two men, at 70s. per fm.; this end is looking well at present, and seems likely to continue. The rise is poor; set to two men, at 40s. per fm. Two men are working at the flat of ore, which continues about as usual. The Dodgeon level is set to drive, wall, arch, &c., at 72s. 6d. per fathom. The cross-cut from the new level is set to two men, at 60s. per fm.

— Jan. 2: There is no change to notice this week. The drift continues good: 14 tons 4 cwts. of ore has gone for the present sale.

NEW CROW HILL.—The lode in the 22 east is good saving work for lead for 1 ft. in width on the south, and for about 2 ft. on the north wall, and is producing blende and mundic. The stopes between the 15 and 22 continue to produce from 4 to 5 tons of blende per fathom: they are coming near to the level, and we shall, of course, go deeper to follow this run of productive ground. At our settings to-day, the 22 was taken at 5l. per fm., the 15 west at 25s. per fm., and the stopes at only 45s. per fm.; a pitch in the 35 at 6l. per ton, and another in the 15 at 10l. per ton for lead. We have had to calcine half the lead, but shall have it ready for sampling by the 13th, and shall then get ready another sampling of blende, of which the piles are large.—Jan. 2.

NORTH BASSET.—T. Glanville, Jan. 6: At Grace's shaft, below the 72, the lode is yielding 2 tons of yellow copper ore per fm. In the winze sinking below the 52 the flat lode is yielding 1 ton of ore per fm. In the 42 the lode is yielding 2 tons of ore per fm. The other parts of the mine are without any alteration to report on.

NORTH DOWNS.—F. Pryor: Having inspected this mine, I send you the following as my report:—The lode in the 30, east of the engine-shaft, presents and encouraging appearance being 2½ ft. wide, worth 24l. per fm.; since the branches in this end have formed a junction we have broken and raised to surface about 3 tons of copper ore, worth 8l. per ton. We have to-day agreed to commence sinking a winze in the bottom of the 20 fm. level, 12 fms. east of the 30 end, to which I cannot help attaching much importance, being under where a good bunch of ore has been taken away from the back, and will go down in whole ground; the end referred to in the 30 is slow for driving in consequence of the lode letting down a large stream of water from the levels above. The 30, west of engine-shaft, has been driven through several fathoms of poor ground, the end now appears to be getting into a different channel of ground; the lode is 2 ft. wide, improving in character, and producing occasional stones of good ore; in the level over there was scarcely any lode to be seen or even a stone of ore, but should the 30 end continue to improve, which I think very likely, we purpose commencing a rise in order to ascertain if this part of the lode has been seen in the levels above. The winze sinking below the 20, east of the shaft, is much the same as when last reported. The 20, east of Bennett's shaft, is communicated with the winze, and we have discovered that the lode is still standing to the south, and it remains to be proved whether this lode is not still standing in whole to Bennett's shaft, and even to the west of it, as there is a piece of confused ground that, in our opinion, is likely to have disordered the lode. The tribute pitches are without alteration since last reported. The ground in the cross-cut continues in a channel, which leaves no doubt that, should we cut the Coal-yard lode in the same, it will be found productive. You will observe our working cost is reduced to about 180l. per month, but, notwithstanding, the mine is worked in an efficient manner, and our prospects are gradually improving.

NORTH FRANCES.—Philip Hosking, Jan. 2: The lode in the 86, west of Eales's shaft, is 5 feet wide, and is very promising, producing stones of grey ore. The lode in the 48 west is 3 feet wide, with a little ore and tin in it. The lode in the 48 east is 2 feet wide, impregnated with yellow ore. The lode in the new winze, under the 36 fathom level, west of Eales's shaft, is 5 feet wide, very promising, and producing some good grey ore.

NORTH TAVY.—R. Williams, Jan. 6: The stopes in the back of the 20, both at old whim-shaft and west of Gill's shaft, are producing good stamping stuff; the lode at the former is worth 25l. per fm., and at the other stope the men are taking down the north part of the lode, which is tinny, but not so good as the south part, which is now standing very good for 3 ft. wide, and will be taken down next week. The excavation for the wheel is not quite completed, but will be so in three or four days. I have set the building of the pit at 2s. 9d. per perch, wall 3 ft. thick.

NORTH WHEAL WREY CONSOLS.—W. Bettis, Dec. 30: The engine-shaft is sunk 4 fms. below the 20, the lode in which is 2 ft. wide, producing a little lead: we hope to get this shaft down to a 30 by the end of next month; sinking by six men, at 13l. a fm., the horse-whim to be paid for by the shaftmen. The 20 has been driven north of the shaft 13 fms. through a good lode, averaging 4 ft. wide, and producing ore throughout the whole of this drivage: we are daily expecting an improvement here, as we are within 2 fms. of the winze sinking below the 10, now driving by six men, at 8l. a fm. We are now also driving a cross-cut west in this level, to intersect a parallel lode seen in the whim round, and from the indications at surface we may expect a good lode when met with: we calculate we have about 4 fms. more to drive, having driven 2 fms. 2 ft. in that direction, at 2l. a fm. The winze below the 10 is down 8 fms. 1 ft., lode 3 ft. wide, producing good work; this will be down to the 20 by the time the 20 end is driven under, sinking by four men, at 6l. a fm. We have finished the dressing-floors, catch pits, and other surface work, consequently our cost will be considerably reduced. The wheel and pitwork is in good working order, and our prospects, on the whole, are highly encouraging.

NORTH WHEAL ROBERT.—W. Godden, Jan. 5: The lode in the 30 end, west of air-shaft, is improving, and now worth 2¼ tons of good ore per fathom. The lode in the boundry winze is larger, and more productive.

OKEL TOR.—W. B. Collom: The ground in the 63 cross-cut continues favourable for driving, and is being forced on to reach the copper lode with all speed. The two copper lodes in the 50 have now formed a junction with each other in the present end; the north lode is about 6 ft. wide, and composed principally of ore and mundic. On the south lode the tributers are working with spirit, and breaking very good work for copper ore; this lode has invariably been found to be richest in the bottom part of the level, and there is every reason to presume when the 65 reaches this point the lode will be found very rich. The lead lode in the 50 south is 3 ft. wide, composed principally of quartz and prian, interspersed with lead ore. In the different tribute pitches there is no alteration to report. There are about 150 tons of arsenical mundic ready for shipment. The masons will complete the walls of the crusher-house by the end of another week, when we shall be ready to put in the crusher, which will enable us to go to market with copper ore.

OOLA.—J. B. Champion, Jan. 2: I have been over this sett, and find it very extensive, embracing several lodes running east and west, or as near as may be. These lodes, from the limited survey which I have made, appear to be imbedded in mine-raised strata, of a limestone formation, congenial for mineral. Upon one of these lodes, which appears to be the principal, operations have been commenced; the main

or engine-shaft is sunk from surface 20 fms., on which, at present, I am of opinion is a branch from the main lode. I would recommend that the engine-shaft should be sunk 5 fms. deeper, to give good backs, as the present stopes will turn out about 1 ton of lead ore per fm. At the bottom of the engine-shaft I would recommend that a cross-cut should be driven north and south, to prove the country, which undoubtedly, from what I have seen and heard, will intersect other lodes. To the east of the present operations, about a quarter of a mile distance, an adit has been driven on a lode which appears to be our main lode; and from the gossan I have seen, from which rich copper has been raised, I would recommend to sink on the lode 20 fms., which can be done with a horse-whim at a small expense. By sinking the engine-shaft and stoping the backs, with the few tons of lead at surface, I hope shortly to be in a position to send a good parcel of ore to market; but before this can be done the crusher must be completed, and a dressing-floor be made, which can be done in about four weeks. In looking at the congenial strata in which the lodes are imbedded, and other favourable indications, I am of opinion, with economy and perseverance, and a small outlay, that the mine may be brought in a paying way. I will forward an inventory of materials, &c., in the course of a few days.

PEDN-AN-DREA.—Capts. Carpenter, Delbridge, and Thomas, Jan. 2: In the 90, east from the engine-shaft, on Martin's lode, east of the junction, the lode is from 2 to 3 ft. wide, producing stamping work of low quality. The stopes behind this end west is worth from 40*l.* to 50*l.* per fm. The ground continues hard for rising in the back, on the south part of the lode towards the 80 winze; by the end of the present month we expect to hole this. We have fixed penthouse, &c., in the 40, at Cobbler's shaft, and commenced to draw the tributers' stuff from that level. We are progressing at Bragg's more favourably since the men have better air to work. Our tribute stopes continue to yield much the same quantity of tinstuff, but not quite so good in quality.

PEMBROKE AND EAST CRINNIS.—J. Dale, G. T. Trewren, Jan. 5: In the 162 cross-cut, south of Reid's shaft, the ground is of a favourable character for mineral. In the 162 north the ground is easy for driving, and is still letting out a pretty deal of water. In the 112 end, east from Smith's shaft, the lode is 14 in. wide, producing good work for ore. In the 100 end, east from Smith's shaft, the lode has much improved during the past week, and is now worth 3 tons of ore per fm., of fair quality. In the winze sinking in the bottom of this level the lode will produce about 2 tons per fm. In the stopes in back of the same level the lode will yield 1½ ton of ore per fm. In the winze sinking in the bottom of the 90 the lode has improved, now worth about 2 tons of ore per fathom.

PENCORSE CONSOLS.—H. B. Grose, Jan. 2: Yesterday being our monthly setting, the following tutwork bargains and tribute pitches were set:—The 45 to drive west of Retallack's shaft, by two men, 3 fms. or the month, at 65s. per fm., the men paying all cost to surface; lode 1 ft. wide, at present unproductive. The 45 to drive east of east shaft, by four men, 6 fms. or the month, at 55s. per fm.; the lode here is looking more promising, and letting out more water than it has before done, which indicates that we are getting home to the shoot of ore gone down in the level above, and I hope shortly to have a good lode in this end; the prospects will warrant it.—Tribute: One pitch in the back of the 6, east of Marshall's shaft, by two men, for one month, at 25s. per ton, the tributers paying all cost to surface, lode 9 in. wide, worth one ton of jack per fm. One pitch in the back of the 6, east of Retallack's shaft, by two men or the month, at 18s. per ton, lode 18 in. wide, worth 2½ tons per fm. One pitch in the back of the 20, east of east shaft, by one man and one boy, at 28s. per ton for the month; also a pitch in the bottom of the adit or Powder house lode, by two men, at 18s. per ton for one month; the lode in this place is presenting very favourable indications, being 1 ft. wide, worth for jack 2 tons per fm., with stones of lead and copper ore; should this lode continue in depth as we can at present see it, it will be of great importance to us, and will greatly enhance the value of this mine, and from the strata of ground and the regularity of the lode, I have not the least doubt but that it will continue, and I hope in a few days to be able to write more favourably on its prospects. I have made the necessary alterations in the horse whim at the east shaft, as recommended to you, and find it answers well, and causes a saving of 7s. per 100 kibbles in the price of drawing. Our dressing operations are progressing satisfactorily according to the number of hands employed. We have now on the floors 70 tons of jack dressed and undressed, and about 3 tons of lead and 3 tons of copper. Our engine is working well, consuming 25 cwts. of coals in 24 hours.

PENDEEN CONSOLS.—Wm. Eddy, Jan. 2: At sump-shaft we have sunk about 3 fms. on the western part of the lode, which have produced some rich stones of grey ore. The east part of the lode being 8 ft. from the western, and that being the most orey lode, we expect they will intersect going down; ground good for sinking. In the 82 north no lode broken for the month, nor shall we before the last week in the month; lode large and strong, and requires great effort to break it, but we expect to have a fair lode when taken down. In the winze in bottom of the 70 no lode broken for the month, but shall break it in a day or two; ground hard for sinking, which I think fits the lode best. In the 70 north the lode is becoming more regular and orey. Our surface-work is going on very well, and our fire-whim nearly brought to mine.

RESPRYN (Lanhydrock).—Wm. Tregay, Jan. 1: I have this day broken beautiful stones of ore from the bottom of the 16 fm. level (a sample of which I have sent on to you to-day); I find a very good lode there. The shaft will be sunk as fast as possible. We have commenced dressing the ore at surface.

RIVER TAMAR.—John Cock, Jan. 6: At the engine-shaft there is no change to notice: we are making fair progress in sinking. The adit cross-cut is progressing favourably; the ground is a little easier for driving.

ROSEWARNE CONSOLS.—J. Richards, Jan. 2: Our engine-shaft is down 6 fms. 3 feet under the 10; for the last fortnight we have had a hard floor of ground at the shaft; the ground has eased again. In the 10 end, east of the engine-shaft, we have met with a large cross-course; we have not gone through it as yet to prove its value. We have set a tribute pitch in the back of the 10, at 6d. in 1*l.* The stope east of the cross-cut is worth 1 ton of copper ore per fm., and on Monday next we shall resume driving the 10 end, west of the engine-shaft. In the cross-cut driving north from Lambo lode the ground is favourable for driving. All other works are progressing satisfactorily.

ROUND HILL.—John Kneebone: The new engine-shaft is sunk 12 fms. 4 ft. 6 in. below the 40. The south end has yet to be squared down. We shall then drive out 3 or 4 feet south, previous to dropping the lift of pumps, as without this being done there is danger of their being shot. The 40 north of new engine shaft is looking well, the main part of the lode is 15 in. wide, and will yield 1 ton per fm. We have cut a counter branch on the hanging wall, which will intersect the main lode in about 6 ft. further north, this branch will average 12 in. wide, and will yield about 1 ton of ore per fm.; this end is likely to improve. The lode in the 40 south will yield 8 cwts. of ore per fm. The stopes below the 30, south of Matthews's winze, as last reported.

SITHNEY WHEAL BULLER.—S. J. Reed, Jan. 6: During the past month the adit level has been cleared rather more than 100 fms., in doing which we experienced much difficulty; but I am glad to say it is now thoroughly cleared to the end, which, from the point where it first touched the lode, is a distance of about 40 fathoms. The adit has been brought up on the new south lode, and find the lode standing whole in the back and bottom of the level for the distance named; the lode is about 1 ft. wide, containing brent, quartz, and a great quantity of mundic, from which I broke several samples, and find it to produce a little tin, but not enough to pay for working. The objects of our exertions are Metal and Schneider's lodes, still standing to the north, and appear to be unnoticed by the ancients, as no cross-cuts have been extended in that direction. We intend to commence a cross-cut north at the most suitable point, and I think in a short distance driving the lodes will be reached. We are now engaged cutting down and preparing the shaft for discharging the stuff, making whim-round, erecting horse-whim, &c. This will be done in a few days, when we shall commence to drive a cross-cut north, and, perhaps, operate at one or two points in the adit level where discoveries are likely to be made. Schneider's lode, in the 50 east, is about 18 in. wide, composed chiefly of prian, mundic, and quartz—at present poor, but having a favourable appearance; set to three men and three boys, at 7*l.* per fm.

SORTRIDGE CONSOLS.—J. Richards, Jan. 7: Hitchins's Engine-Shaft: In the 74, east and west, the lode is 2 feet wide, containing capel, mundic, quartz, and a little ore. In the 62 west the lode is from 2 to 3 feet wide, and yields rich stones of ore. In the 62 east the lode is 4 feet wide, worth 1 ton of ore per fathom. In the rise in the back of the 50 west the lode is from 2 to 3 feet wide, containing flookan, quartz, and a little ore of good quality, and is promising. In Crossman's winze, sinking below the 50 east, the lode is worth 1 ton of ore per fm. The lode in the stopes in the back of the 50 east is worth 3 tons of ore per fathom. In the 40 west, and west of the cross-course, the lode is about 1 foot wide, containing gossan, quartz, mundic, and a small proportion of copper ore. The lode in the rise in the back of the 40 west is 2 feet wide, and yields a little ore.

SOUTH BEDFORD CONSOLS.—J. Phillips, Jan. 7: There is no alteration worth noticing at Red Whim shaft or the 62.—South Lode: In 36 east the lode is very promising, and yielding good saving work. The lode in the winze sinking in bottom of the adit level is still producing 1 ton of good ore per fm.

SOUTH CARN BREA.—T. Glanville, Jan. 6: There is no alteration to report.

SOUTH CLIFFORD UNITED.—At Pulla, No. 6 lode west is now 2½ ft. wide—a very kindly lode, composed of mundic, gossan, flookan, spar, &c.; this lode east is 1½ ft. wide, very promising; so also is No. 3. The lode at Trehaddle is not yet cut.

SOUTH CRENVER.—J. Delbridge, E. Chegwin, Jan. 5: In the 94 west the lode is 20 in. wide, worth 1 ton of ore per fathom. In the 84 west the lode is 2½ ft. wide, worth ½ ton per fm. In the 74 west the lode is 2 ft. wide, worth ½ ton per fathom. The 54 and 44 rise are holed, and the ground set on tribute. In the 34 west the lode is 2 ft. wide, worth 1½ ton per fm. In the 84 east the lode is 2½ ft. wide, producing stones of ore—more kindly than usual; from the appearance of the lode we may expect an improvement. Our tribute throughout the mine is without change.

SOUTH CUDDRA.—S. Truran, Jan. 7: We have driven 17 fms. on the course of the gossan lode since it was first cut through, and have cut into it twice since, the last cutting through was yesterday, and we found it about 2 ft. wide, composed of spar, gossan, and mundic; it appears to be changing its character, it is not so red, with a great deal more mundic, and looking more kindly for mineral; in my opinion when we reach the intersection we shall get ore; the intersection is underlying from our drivings, and on that account we shall have to drive further to reach it—I think about 4 or 5 fms. Since last report we have driven 1 fm. on Little Crinnis lode; it is improving in size as we go on, and producing a little copper and mundic. The north shaft is sunk nearly 4 fms. below adit, sinking for 3*l.* 15s. per fm., and is perfectly dry. The engine is working well, and consumes from 7 to 8 tons of coals per month.

SOUTH DOLCOATH AND CARNARTHEN CONSOLS.—Wm. Roberts, Jan. 5: The following tutwork bargains were set on Saturday last:—A rise in the back of the 70 by six men, at 7*l.* per fm.; this we intend to communicate with the level above for ventilation, and to open a piece of tribute ground in the bottom of the 50. Two men are clearing the 50 west, towards the great cross-course. The adit to drive east of Brea Valley by four men, at 3*l.* 10s. per fm.; this is now 3 fms. in the cross-course. The adit to drive south by two men, at 2*l.* 10s. per fm.

SOUTH LADY BERTHA.—Wm. Goss, Jan. 7: The mine being carried down, the men are now engaged in taking down the lode, which is producing some good work for copper ore. As the days will now be getting longer, we must proceed with the erection of the water-wheel and other machinery.

SOUTH WHEAL TOLGUS.—Jan. 2: Youren's Lode: The lode in Michell's engine-shaft, sinking below the 110, is 15 in. wide—unproductive. We have set the sumpmen to cut trip-plat and cistern plat, and to cut bearer holes, &c., in the 110. The lode in the rise in the back of the 110, west from Michell's shaft, is 15 inches wide, yielding 1½ ton of ore per fm. The lode in the 100, west from Michell's shaft, is 15 inches wide, producing 2 tons of ore per fm.; the lode in the two stopes in the back of the 100, west from shaft, are yielding 2 tons of ore per fm. each. The lode in the winze sinking in the bottom of the 100, west from Michell's shaft, is 18 in. wide, yielding 1½ ton of ore per fathom; the lode, or the south part of the lode in the 100, west from Michell's, where we have a pare of men stripping it down, is 18 inches wide, producing 1½ ton of ore per fm. The lode in the 90, west from Michell's shaft, is 8 in. wide, producing occasional stones of ore. We have suspended the winze in the bottom of the above-named level, in consequence of cutting water; it is down 9 fms. below the bottom of the 90, and is 16 fms. in advance of the 100 end; the lode in the winze will produce 2 tons of ore per fm. We have set a new stope in the back of the 90, west from Michell's, to six men. The lode in the 78, west from Michell's, is 1 foot wide—unproductive; the lode in the stope in back of the 78, west from Michell's shaft, is 18 in. wide, yielding 1½ ton of copper ore per fm.; the ground in the 78 cross-cut, west of Michell's, driving north, is moderately easy, the same remark will apply to the 78 driving south.—South Lode: We have set the 110 to drive east on the lode, which is 1 ft. wide, consisting of quartz, peach, pryan, and stones of ore. The lode in the 100, east of Michell's, is small and poor. The lode in the 90, driving east from Michell's, is 3 feet wide, yielding 2 tons of ore per fm.; the lode in the stope in the back of the above level is yielding 1 ton of ore per fm. We have taken the men from the 78 end east, and have put them to sink a winze in the bottom of said level. We have also taken the men from the 54 east (now holed), and have put them to drive the 40 fm. level, east from Michell's, through the cross-course.—South Branch: The lode in the 30, driving west from Morcom's, is small and poor. The lode in the 20, driving west from Morcom's, is 15 in. wide, producing good stones of ore. The lode in the 10, driving west from Morcom's, is 18 in. wide, and poor. On the whole, we think our prospects in the mine are a shade better than when last reported upon.

ST. AUSTELL CONSOLS.—R. H. Williams, Jan. 2: I could never report more sanguinely on this property than at this moment. The lode in the 35 is looking very encouraging, and from what I can see at present I believe we are near a course of tin. A sample tried to-day of the lode, as broken down, produced about 100 per cent. more than the average of our stuff. We have also great prospects for tin at Young's shaft; I believe here, from recent discoveries, we have a large quantity of rich tinstuff—in fact, a shoot of tin standing from the 25 to surface, or shallower. This run of ground I believe will be found south of all our workings—at Young's shaft. I never saw the mine looking so promising since it has been working.

SWANPOOL.—J. Kitto, Jan. 6: The western shaft is now sunk 6 fms. below the 20, and is progressing favourably. The lode in the 20 end, west of this shaft, is 5 ft. wide, 1 ft. of which is saving work for lead of good quality; this is a very promising looking lode, and I think will be much more productive at a deeper level, as everything at present seems to warrant it; the stope in back of this level is worth 15*l.* per fathom. The south branch is the 60, east of cross-cut, is 1 ft. wide, but at present unproductive. The lode in the 50, east of new shaft, is 2 ft. wide, producing occasional stones of good lead ore. The 30, east of new shaft, is without any material alteration. We have three tribute pitches, which are yielding a fair quantity of work for the floors. The machinery, with all surface operations, are going on very satisfactorily.

TAVY CONSOLS.—R. Williams, Jan. 6: The prospects of this mine have undergone no material change since my last report. The tributers are making wages, and we hope to have 40 tons of copper ore for December. The stope in the back of the 56 is producing tin and copper together. We are in this place proving a large piece of unexplored ground, and we hope the tin and copper will pay the cost of the operation. We are burning the tin which we have stamped from the burrows, and in a few days shall prove its yield.

TEES SIDE.—R. Bray, Jan. 1: This is pay and setting-day. Metal Band level let to two men, at 45s. per fm., for 4 fms., or the month; this level is very much improved since my last report. The rise in the back of the vein, for ventilation, is up 7 fms., and let at 32s. 6d. per fm. The stamps are working well, and, if the weather keeps open, we shall soon have another sale of ore from them and the level.

TINCROFT.—W. Teague, J. Andrew, J. Cock: North Tincroft Lode: In the 154, driving west of Tyrie's engine-shaft, the lode is 2 feet wide, producing saving work for tin. In the 154, driving east of the shaft, the lode at present is poor. In the 142, driving east of shaft, the lode is 3 feet wide, producing saving work for tin and copper. We have suspended the 142 for the present. In the 100, on East Pool, driving west of cross-cut, the lode is 1½ foot wide, producing stones of ore, but not in sufficient quantities to value. The stopes in the back of the 90, east of Willoughby's shaft, are improved for tin, and worth 20*l.* per fathom. In the 60, driving east of Willoughby's shaft, the lode is 2 feet wide, but unproductive at present.—Highburrow Lode: In the 173, driving east of Martin's east shaft, the lode is 3 ft. wide, worth for tin 25*l.* per fm. In the 173, driving west of shaft, the lode is 3 feet wide, worth for tin 15*l.* per fm. In the 162, driving east of shaft, the lode is 2 feet wide, and worth for tin 16*l.* per fathom. The stope in the bottom of the 120, on Chapple's lode, west of Downright, is still looking well, and worth 30*l.* per fm. for copper.

TREBARVAH.—R. R. Michell, Jan. 1: We have got a splendid lode at the flat-rod shaft, cut yesterday; it will turn out from 3 to 4 tons to the fm., the length of the shaft, and improving. We have hauled a few kibbles to surface; it is a hard yellow ore, and will make a product of 9 or 10. This is the best thing ever yet seen in this mine. We can report more fully on it in a week.

TREWANE UNITED.—R. Reynolds, Jan. 5: Since last report the cross-cut in the 35 has been driven about 5 fms.; the lode is still ahead, and I hope to cut it in a day or two, when I will write you the particulars.

TREWETHA.—T. Richards, W. Rowe, Jan. 6.: The engine-shaft is down 7 fms. 4 ft. below the 70 fm. level. The 70 end south is worth 3*l.* per fm.; the north end is poor. In the 60 end north the lode is disordered. The 50 north is without change. The stopes are producing much as usual. We shall put the new boiler to work on Saturday next.

TYNE HEAD.—G. Millican, Jan. 1: The stamps are now fairly at work on the ore at surface, but we have been so much retarded by the millwrights that I fear we shall be stopped with snow before any results can be obtained. We have a vein 30 ft. wide, mixed throughout with ore, and opened ready for stoping. Our prospects are very good as soon as winter is over. The adit level is being driven south by four men, and will, I hope, ere long, cut an east and west vein.

TYWARNHAILE.—J. Dale, J. Edwards, Jan. 6: The leat for condensing the water, about ½ a mile in length, will be finished this week. We have fixed 30 fms. of rails at the railway shaft. Every branch of work is progressing very well. We shall sample about 40 tons of copper ore on Jan. 19.

UNITED MINES (Tavistock).—J. Champion, Jan. 5: The cistern plat in the 36 is completed. The lode in the 36 is worth 12*l.* per fm. for tin. The pitch in the back of the 36 is worth fully 13*l.* per fm. The upper pitches are looking poor, taking the price of tin into consideration.

VALE OF TOWY.—T. Harvey, S. Harper, Jan. 5: The lode in the 60, north of Clay's engine-shaft, is 3½ ft. wide, composed of barytes, killas, and some good lumps of lead; in the same level south the lode is 3 ft. wide, unproductive. The lode in the 50, north of this shaft, is 3 ft. wide, producing 10 cwts. of lead per fm.; the lode in the rise in back of this level is 3½ ft. wide, producing a little lead, but not sufficient to value. The lode in No. 2 winze, in bottom of the 40, north of this shaft, is 2 feet wide, producing 4 cwts. of lead per fm. At Bonville's shaft, in the past week, we have been engaged in taking out penthouse, &c., so as to enable us to draw from the 50 with the steam-whim. The lode in the 50, north of this shaft, is 3½ ft. wide, producing 25 cwts. of lead per fm.; in the same level, south of said shaft, the lode is 3 ft. wide, producing 12 cwts. of lead per fm. The lode in the 40, north of said shaft, is 2½ ft. wide, producing 6 cwts. of lead per fm. The lode in the 50, south of Field's shaft, is 6 ft. wide, producing some good lumps of lead, but not to value. No. 1 winze, in bottom of the 40, south of said shaft, being down to water, we have suspended it, and put the men to rise in back of said level, where the lode is 2 ft. wide, producing 12 cwts. of lead per fm.; in the same level south the lode is 1½ ft. wide, producing 5 cwts. of lead per fm. All other parts of the mine are the same as last.

WEST ALFRED CONSOLS.—S. Lean, R. Stevens, Dec 29: We are carrying about 1 foot of the north part of the lode in the 95 east; we intend driving in this direction a few feet further, and then cut through the lode to see the south wall; as far as we have seen it, it is of the most encouraging character. The lode in the 95 west is 2½ feet wide, composed of mundic, spar, and stones of copper ore; a lode of great promise. The lode in the 85 east is 3 feet wide, composed of prian, spar, and ore. We are preparing to sink a winze below this level, where the lode is worth 50*l.* per fathom. The stopes in the back of this level, east of No. 3 winze, are worth 35*l.* per fathom; so also the stopes west of same winze are worth 35*l.* per fm. The lode in the 75, west of No. 2 winze, will prouuce 3 tons of ore per fm. The lode in No. 4 winze, sinking below the same level, east of flat-rod shaft, will yield 2½ tons of ore per fathom. No lode taken down in the 65, west of No. 2, since our last report.
— Capt. Lean, Dec. 30: We this day commenced taking down the lode in the 65, west of No. 2 winze; we have cut into it 18 in. and it looks very promising, composed of lead, spar, and ore; we shall see more of it in a day or two.

WEST BASSET.—Wm. Roberts, Jan. 5: On the engine lode, in the rise in back of the 75, west of Percy's shaft, the lode is 4 ft. wide, producing 2 tons of ore per fm. The winze sinking under the 65 produces 1½ ton per fm.; lode 5 ft. wide. In the 52 west the lode is 3 ft. wide, worth 1 ton per fm. The 42 west is improved; lode 3 ft. wide, good tribute ground. Percy's whim-engine is nearly erected, and the skip-road is being put in as fast as possible.

WEST SHARP TOR.—W. Richards, Jan. 4: There is no alteration in the character of the lode in the 70 cross-cut since last report. The part of the lode being cut into in the 110 cross-cut, east of Morris's shaft, is not quite so orey as it was; the water is continuing strong. There is no change in the cross-cut, west of the shaft, in the 110. The ground at Morris's engine-shaft is becoming more jointy, and contain less iron and more chlorite; the part of the lode carried contains some good stones of grey and yellow copper ore.

WEST WHEAL TREVELYAN.—J. D. Osborn, B. Gundry, Jan. 2: We have found Park copper lode just where we expected; it is about 4 feet wide, with a very pretty gossan back, everything we could expect to see at surface. We have commenced Cater's shaft, and sunk 9 feet. As soon as we see a little more of the nature of the ground, we shall set 10 fms.; at present the ground is very favourable.

WHEAL ADDAMS.—Capt. R. Moore, Jan. 8: I have been underground to-day: there is a fine lode of lead on the new lode, let to Haymen at 3*l.* per ton to rise and dress; and if it holds as at present he will make 10*l.* per week. We expect to cut the same lode in the 28 in a few days; this lode is standing all through the mine, from all appearance. I will write more fully next week.

WHEAL AGAR.—W. Roberts, Jan. 5: The sinking of the engine-shaft under the 60 is progressing favourably. In the 60, west of cross-course, the lode is nearly 1 ft. wide, producing occasional stones of ore. In the 50, east of Winstow shaft, the lode is 2 ft. wide, very promising, with good stones of yellow ore—tribute ground.

WHEAL EDWARD.—M. H. East, Jan. 4: North Lode: The 71 set to drive east by six men, at 10*l.* per fm., 1 fm. stent. The 71 to drive east of No. 7 winze by six men, at 6*l.* per fm., one month stent. The 71 to drive west of No. 7 winze by six men, at 6*l.* 10s. per fm., one month stent. The 62 to drive west by six men, at 7*l.* per fm., 3 fms. stent. The new winze in bottom of the 52 west is set to six men, at 7*l.* per fm., one month stent.—Tribute: No. 2 pitch, in back of the 62 east, is set to six men, at 4s. in 1*l.*, and a new pitch east of the boundary cross-course, in back of the same level, is set to four men, at 4s. in 1*l.* No. 2 pitch, in back of the 52 east, is set to six men, at 7s. in 1*l.*, and No. 3 to six men, at 10s. in 1*l.* No. 1 pitch, in back of the 41 east, is set to two men, at 9s. in 1*l.* All the tribute settings are for two months.—South Lode: The engine-shaft to sink below the 61 by 12 men, at 40*l.* per fm., one month stent. The 61 to drive west by six men, at 5*l.* per fm., 4 fms. stent. The 50 to drive west by two men, at 5*l.* 5s. per fm., 1 fm. stent. A rise to stope in back of the same level by six men, at 4*l.* 4s. per fathom, one month stent. All the tramming, wheeling, filling, and landing is set to 13 men, for two months, at 41*l.* 10s. per month. The value of the lodes in the ends and shafts is without alteration.

WHEAL EMMA.—W. Goldsworthy, Jan. 7: Since my last report we have brought to surface the produce of the tin lode, in cutting through it, which we have spalled and sampled in the stone in the usual way, with a view to taking an average sample of the whole lode; should the produce of it throughout the mine prove equal to this sample, there are large quantities of superior tin ground laid open, which will be worked at a low tribute, and greatly add to the value of our reserves. We are progressing favourably with sinking the engine-shaft, which is now about 10 fms. below the 34, the flookan still going down on the south wall with great regularity. There is no alteration in any other part of the mine since last week.

WHEAL FRANK MILLS.—J. P. Nicholls, Jan. 6: The 45 south, on east lode, has been holed to Henley's pitch to-day; this pitch has been worked from the 60 up about 3 fms. above the 45; the level will be of great service to the working of this pitch, and all the other pitches further south as it reaches them; it has also opened ground to the north of the latter pitch that can be set at a moderate tribute. The 60 south-east lode is at present producing about 6 cwts. of lead per fm., and looks well for further improvement. The 72 south is worth ½ ton per fathom. In the 84 north, on east lode, the lode is from 4 to 5 feet wide, chiefly barytes and quartz, with strong spots of lead intermixed. The 84 north, on west lode, is at present unproductive of lead to value. The stopes in the back of the 84 south, on west lode, are worth ½ ton of lead per fathom. Cole's stope, in back of the 60 north, on the east lode, is producing from 10 to 12 cwts. per fathom. All other tutwork bargains are without alteration since last reported. We have now ten tribute pitches working, varying in value from 5 cwts. to ½ ton of lead per fathom.

WHEAL FRIENDSHIP.—Taylor's shaft is now about 6 fms. below the 230; we expect to hole the 230, east of Taylor's shaft, to the winze this month. The lode in the winze sinking below the 170 is 2½ ft. wide, producing a little ore—nothing to value; we expect to hole this winze to the 180 this month. The 170 west, on north branch of south lode, is holed to the 170 on the south lode; we have put four men and two boys to stope the bottom of the level, the lode will yield 1½ ton of ore per fm. The stopes above the 170 will yield 1½ ton of ore per fm. The stopes in back of the 150, east of Brenton's shaft, on south underlay, will yield from 5 to 7 cwts. of lead ore per fm. The lode in the 80, east of Brenton's plane, is 18 in. wide—poor. The 40 is much the same as last reported. The lode in the 10, west of Gorman's winze, is 6 in. wide, yielding a little ore—nothing to value; the lode in the 10, east of Lucas's winze, is 9 in. wide, producing occasional stones of ore—nothing to value; the lode in the 10, east of Ware's cross-cut, is at present small and poor, we expect an improvement here shortly; the lode in the 10, west of Ware's cross-cut, is 2 ft. wide, and will yield 1 ton of ore per fm.; the stopes below the adit here, on the south lode, will yield 1 ton of ore per fm.—Kent's Lode: The lode in the 60 west is 18 in. wide—poor. The lode in the 60 east is 1 ft. wide—poor. The lode in the 24, east of Kent's shaft, is 18 in. wide—poor. The lode in the 12 east is 2½ ft. wide, and will yield 1 ton of ore per fm.; the lode in the 12 west is 8 in. wide—poor. The lode in the adit end east is 8 in. wide, producing a little ore, but not to value. The lode in the rise above the adit level is 8 in. wide, and will yield ½ ton of ore per fm. The stopes above the adit level will yield 1 ton of ore per fm. The tribute pitches are much the same as for some time past. We sampled at Morwellham, on Tuesday, computed, 169 tons of ore.—Jan. 1.

WHEAL GRENVILLE.—G. R. Odgers, Jan. 2: There is no alteration to report on at the shaft since my last advice: because no lode has been taken down, but as far as I can judge it maintains its size; I hope we shall take it down next week, when I will write you full particulars. In the 54 west the lode is from 18 to 20 in. wide, of ore, gossan, and a very congenial quartz, not sufficient of the former to value, but which I consider to be a very kindly lode indeed, and if the ground by the side of it continue stiff and compact granite, I am of opinion it looks favourable for making ore. I hope to communicate the rise with the winze to the east of the shaft this month, when we shall be able to resume the driving of the eastern end.

WHEAL GUSKUS.—J. Richards, Jan. 4: Saturday last being our setting-day, we set the following bargains:—The 30 end, east of cross-cut, at Francis's shaft, to six men, 3 fms. stent, at 4*l.* per fm., lode 4 ft. wide; there is another part coming in from the north side about 9 in. wide, yielding some excellent work for tin; set another cross-cut in the 20, east of Francis's shaft, to drive north. I consider 4 fms. of a cross-cut will cut the lode at this point. The men in the winze sinking under the 30, west of Rapson's shaft, on Martin's lode, have not yet completed their bargain; as soon as they have done so I mean to set the ground on tribute.

WHEAL HARRIETT.—S. Williams, Jan. 2: We are sinking the engine-shaft about 3 ft. per week. During the past week there has not been much done in the 90, east end; the men have been engaged in cutting plat in this level, which is completed, and they will resume driving the end on Monday next. The lode in the winze sinking below the 74 is 1 foot wide, spotted with ore. The lode in the rise from the back of the 74 is 1½ ft. wide, producing 2 tons of ore per fm. The lode in the winze sinking below the 65 is 2 ft. wide, worth 10*l.* per fm. The deep adit cross-cut is without change to notice since last reported.

WHEAL HENDER.—J. Trewren, Jan. 6: We set our engine to work last Wednesday, and shall now commence sinking the shaft with all possible speed. In sinking for the bearers and cistern we find the lode is 3 feet wide, composed of prian, mundic, and stones of ore, with a very promising appearance. The lode in the adit end, driving east, is 2 feet wide, composed of spar, flookan, and mundic, with occasional stones of ore. Rosewarne lode is 2 feet wide, and poor at present, but from the appearance of the ground we expect a change shortly.

WHEAL MARY EMMA.—W. Doble, Jan. 6: The lode in the stopes is looking well. The men have to-day taken down the lode as far west as it had been opened, and broke fine work for tin; it appears to be going into quite new ground. I have taken a sample of the tin to-day; it is a very fine one. The severe weather has for the present stopped our dressing operations.

WHEAL POLLARD.—J. Nance, Jan. 2: The 35 cross-cut end is now in an elvan course, and we are expecting to intersect a lode at or near the north side of it, but we do not expect to reach the No. 3 lode, in the south cross-cut end, before we have extended it 5 or 6 fms. further; the progress in driving continues about the same as it has been for some time past.

WHEAL SIDNEY.—W. Edwards: Since my general report of Dec. 23, we have intersected a cross-course in No. 5 level east, bearing 10° east of north, and have every reason to believe that on getting through it we shall find the lode hove north, which we purpose to follow. The lode in No. 5 west is 2 feet wide, with a rich leader of ore 3 in. wide; the end in the last 3 ft. having much improved, and still letting out a great quantity of water, we shall continue to push on this end with the utmost dispatch, to meet the rich shoot of tin gone down in the level above. Our 24 tributers are progressing satisfactorily, and working in good spirits. Other parts of the mine are without alteration.

WHEAL TALLACK.—John Smith, Jan. 5: The lode at the engine-shaft is 20 in. wide, composed of spar, mundic, and copper ore; the lode in the 10 end east is 1 foot wide, producing 1 ton of jack and copper ore per fm. The stopes over this level will produce ½ ton of jack per fathom. On the south lode, in the western end, the lode is 15 in. wide, producing occasional stones of black ore. In the east end the lode is 10 in. wide—spar and mundic.

WHEAL TEHIDY.—D. Lanksbury, Jan. 5: In the 50, driving west on the tin lode, the lode is divided in branches, at present unproductive; in the same level and lode, driving east, the lode is 1½ ft. wide, containing stones of tin. In the 50, driving west on the north lode, the lode is 2 ft. big, producing spar, mundic, and stones of ore. The other parts of the mine have much the same appearance as last reported. Two pitches on the north lode—one in the bottom of the 60, and the other in the back—are looking tolerably well.

WHEAL TRELAWNY.—Wm. Bryant, Wm. Jenkin, Jan. 7: Smith's shaft is sunk 3 fms. 5 ft. below the 142. The lode in the 142, south of the cross-cut, is 3 ft. wide, worth 15*l.* per fm. We have intersected the capels of the lode in the 132 north, and hope by another week to see the lode; in the same level south the lode is 18 in. wide, worth 8*l.* per fm.; the lode in the winze sinking in this level, south of Smith's, is 3 ft. wide, worth 14*l.* per fm. The lode in the 120, north of Chippindale's, is 2 ft. wide, worth 12*l.* per fm. In the 108 north it is 2 ft. wide, worth 7*l.* per fm. In the 98 north it is 18 in. wide, worth 8*l.* per fm.—South Mine: The lode in the 142, south of Trelawny's shaft, is 3 ft. wide, worth 8*l.* per fm.; in the north end the men are engaged in cutting through the capels of the lode. The lode in the 130 south is 3 feet wide, worth 10*l.* per fm. The stopes and pitches are producing much as usual.

WHEAL TREVELYAN.—J. D. Osborn, B. Gundry, Jan. 2: At Watson's engine-shaft the men are engaged putting in bearers, cistern, and fixing the lift in the 50, which we shall complete next week, and put everything in good order to resume sinking. No lode has been taken down in either of the ends in the 40, on Richards's tin lode. The 50 cross-cut is progressing favourably.

WHEAL UNION.—T. Glanville, Jan. 6: There is no alteration to report on. The 20, east of engine-shaft, continues to be worth 20*l.* per fm. for tin.

WHEAL WREY CONSOLS.—P. Clymo, jun., Wm. Hancock, R. Roskilly, Jan. 7: The engine-shaft is sunk 5 fms. under the 64. The lode in the 64 south is 4 ft. wide, producing ½ ton of lead per fm.; in the same level north it is 4 ft. wide, producing ½ ton of lead per fm. In the 54 south it is 2 feet wide, producing 5 cwts. of lead per fm.; in the same level north it is 2½ ft. wide, producing 4 cwts. of lead per fm. In the 44 south it is 2 ft. wide, producing 7 cwts. of lead per fathom; in the same level north it is 2½ ft. wide, producing 6 cwts. of lead per fm. In the 33 north it is 1 foot wide, producing stones of lead. The stopes and pitches are producing much as usual. We sold on Dec. 31 a parcel of lead ores, computed 60 tons, to Messrs. John Bibby, Sons, and Co., at 18*l.* 3s. per ton.

WHEAL ZION.—J. T. Phillips: In the 30 fm. level west the lode continues of much the same size and character, not quite so productive for copper ores as in the early part of last week. In the 50 west the north lode is about 2 ft. wide, producing stones of copper ore. The ground continues hard in the 80 fm. level on this lode. In the 65 east the lode is small at this time. In the south cross-cut in this level, towards the south lode, the ground is favourable for driving. In the north cross-cut the ground is a little harder. In the Glebe adit the ground is more favourable for driving, present price 40s. per fm.

SPONTANEOUS COMBUSTION.—For some time past jet mining has been carried on at a certain point in Westerdale Head, Yorkshire; and a few weeks since the heaps of alum shale excavated and turned over by the miners commenced giving out much smoke, accompanied by a very noisome smell—that of sulphuretted hydrogen—which has been perceived at points not less than six or eight miles distant, and for three or four miles around every room is penetrated by the stench. Smoke is issuing in dense volumes from many parts of the mass, which comprises many thousands of tons of the displaced shale, and in some places sulphur is freely deposited. At a depth of 4 or 5 in. the whole mass is incandescent, and flakes of red-hot shale may be raked out in any quantity. It appears probable than many weeks will elapse before the materials generating the heat will be exhausted. The fumes, although very annoying, have not proved detrimental to health.

PERUVIAN MINERALS.—We have lately inspected a collection of minerals from South America, which are now on view at 132, Drummond-street, Euston-square; these have been brought to England by Dr. Charles Farris, who during the period the typhus fever was rife in Peru was dispatched by the authorities to the city of Trujillo. Availing himself of the opportunities afforded by his sojourn there, Dr. Farris obtained a quantity of memorials of pottery, silver ornaments, and other antiquities from the period of the Incas. So complete an illustration of the domestic habits of the Children of the Sun has, we believe, never before been collected, and the museum is worthy of a visit from all who are interested in obtaining a knowledge of a people who, previous to the advent of their Spanish conquerors, and were semi-civilised, but have now entirely passed away, their only records being the monuments which time, and the devasting hand of man, is fast destroying. Some of the specimens, both in metal and pottery manufacture, show a great superiority over those produced in the country at the present day.

ROYAL COLOSSEUM.—This favourite place of amusement is now under the sole direction of Dr. Bachhoffner. In addition to the varied exhibitions for which this establishment has long been noted, Mr. George Buckland appears in a new entertainment called "Britannia's Picture Gallery; or History Made Easy:" this is illustrated by a new set of dissolving views, accompanied by a descriptive comic lecture, interspersed with songs, which are given with all Mr. Buckland's usual felicity. Natural magic is pourtrayed by Mr. J. Downes; and an interesting lecture, with views on the soul-stirring subject, the Indian Rebellion, is delivered by Mr. Traice. During the intervals there is a well executed vocal and instrumental concert, in which Mesdames Zamperini and Freeman, and Mr. Thorpe Peed, as vocalists, amuse their auditory; the gigantic cyclorama of Lisbon forming a conclusion to the whole of the entertainments. During the holidays the exhibition has proved a great source of amusement to visitors, and an evening or morning can be spent there combining both pleasure and instruction to juveniles, and those of a mature age.

The Mining Market; Prices of Metals, Ores, &c.

METAL MARKET, London, January 8, 1858.

COPPER.	£. s. d.
Copper wire .....p. lb.	0 1 2 -1 2½
ditto tubes ..... „	0 1 2½-1 3
Sheathing and bolts.. „	0 1 0 - —
Bottoms ..... „	0 1 0½- 1 1
Old (Exchange) ..... „	0 0 10½- —
Best selected.....p. ton	110 10 0- —
Tough cake ..... „	107 10 0- —
Tile ..... „	107 10 0- —
South American..... „	98 0 0-100 0 0

IRON.	per Ton.
Bars, Welsh, in London .	7 10 0- 8 0 0
Ditto, to arrive	7 0 0- —
Nail rods	8 0 0- —
„ Stafford. in London	9 0 0- 9 10 0
Bars ditto	9 0 0-10 0 0
Hoops ditto	10 0 0-10 10 0
Sheets, single	10 0 0-10 10 0
Pig, No. 1, in Wales ...	3 15 0- 4 5 0
Refined metal, ditto.....	4 10 0- 5 5 0
Bars, common, ditto ...	5 5 0- 6 10 0
Ditto, railway, ditto ...	6 5 0- 6 10 0
ditto, Swed. in Lon.....	13 10 0-14 15 0
in stock to arrive	— — —
Pig, No. 1, in Clyde ...	2 18 0- 3 0 0
Ditto, in Tyne and Tees.	2 15 0- 3 0 0
Ditto, forge	2 15 0- —
Staffordshire Forge Pig.	4 10 0- 5 0 0
Welsh Forge Pig	3 0 0- 3 5 0

LEAD.	
English Pig	21 10 0-22 0 0
Ditto sheet	23 0 0- —
Ditto red lead.....	24 10 0-24 15 0
Ditto white.....	27 0 0-30 0 0
Ditto patent shot	26 0 0- —
Spanish, in bond	21 10 0-22 0 0
American.....	none.

* At the works, 1s. to 1s. 6d. per box less.

BRASS.	Per lb.
Sheets	11d.
Wire	10½d.-11d.
Tubes	14d.-15d.

FOREIGN STEEL.	Per Ton.
Swedish, in kegs 22	0 0- —
„ to arrive 21	0 0-21 10 0
Ditto, in faggots 23	10 0-24 0 0
English, Spring 15	0 0-23 0 0

QUICKSILVER	
.....p. lb.0	2 0- —

SPELTER.	Per Ton.
Foreign 23	15 0-24 0 0
To arrive..... 22	10 0-23 0 0

ZINC.	
In sheets 34	0 0- —

TIN.	
English, blocks 103	0 0- —
Ditto, Bars (in barrels) 109	0 0- —
Ditto, Refined 111	0 0- —
Banca 108	0 0-110 0 0
Straits 105	0 0-106 0 0

TIN-PLATES.*	
IC Charcoal, last qua. p. box.	1 13 0- 1 14 0
IX Ditto 1st quality „	1 19 0- 2 0 0
IC Ditto 2d quality „	1 11 0- 1 12 0
IX Ditto 2d quality „	1 17 0- 1 18 0
IC Coke ..... „	1 6 0- 1 7 0
IX Ditto ..... „	1 12 0- 1 13 0
Canada plates.....p. ton	15 0 0-15 5 0
In London; 30s. less at the works.	

Yellow Metal Sheathing...p. lb.	10d	—
Wetterstedt's Pat. Met.... p.cwt.	2 2	0
Indian Charcoal Pigs in London	—	- 7 10 0

REMARKS.—The year 1857 has been indeed characterised in many respects by disasters of a most serious, alarming, and critical nature—not merely in a commercial point of view, although the sudden and severe check we have sustained in this way will be long felt, but the immense reverse we have experienced in our colonies by the Indian mutiny—a calamity which, we deeply regret, has been attended with the most fearful consequences, occasioned doubtlessly in a great measure by want of proper precaution on the part of the East India Company, who, after having had it represented to them by well-informed military and other eminent men, that the existence of the Sepoy army was likely some day to terminate in revolt, should, in opposition to positive facts and the best opinions, not have adopted some course to counteract such a movement before the evil hour arrived, when, alas, it was too late to prevent the bloodshed of so many people. To entrust the government of so vast an empire to a body of men whose principal object is to increase their own gains, certainly appears very unwise, unjust to the inhabitants of the country, and discreditable to a Christian nation. The indifference exhibited to the well-being of the natives of Hindostan has lately been so evident as to convince most persons of the fallacy of granting power to a mere company of traders, to exercise authority, both military and civil, over large dominions. Why should not the East Indian colonies and other places be under similar administration to the West Indian colonies, Australia, &c.? Monopolies are perfectly odious and truly obnoxious to the mind of every real Englishman, and it is quite time that such associations terminated their existence in this country. Our commerce has necessarily been considerably impeded by the outbreak in India, but we are happy to say that confidence is again being gradually restored, and perhaps, after the lapse that has taken place in exports, stocks in the presidencies will have become almost exhausted, and cause a very favourable and rapid improvement in those markets, which will naturally give an impetus to our market. It is gratifying to state that, out of the numerous failures that have been announced during the recent panic, comparatively few have been East Indian merchants. The exposures here a year or two since, relative to the mode of trading adopted by random speculators, seem to have had some weight with the remaining houses, and probably has taught sellers to exercise extra caution in granting credit. The enormous fall in the value of East Indian produce generally has, of course, been very trying to many firms in that trade, especially to those of limited capital; and had it not been for the latitude shown them by their creditors, we should have had many names added to the terrible list of suspensions. The Indian banks, holding a vast number of documents and bills, have not been able to afford the usual accommodation to merchants making shipments; consequently, orders have been frequently withheld. America, again, has been the scene of much trouble, involving many of our leading houses, and bringing about, in many instances, their entire ruin. The mode of selling imports there at six months credit is very objectionable, and sellers ought, one and all, to decline such terms. There is a large amount of English capital locked up in their railways, but we hope shortly that things will assume a more settled appearance, and that the various lines, when carried out, will prove successful. The stoppages in this kind of work, both in America and India, have been principally the means of bringing about the reduced price of rails, of which many of the home companies seem ready to avail themselves, and contract at once, rather than risk the market any longer. The manner in which trade has been conducted in Hamburgh and Sweden ought not to be encouraged: the greatest abuses have been permitted, and even countenanced, by many firms enjoying the reputation of respectability. It is quite time they were singled out, and considered defunct. The Chinese war has not retarded shipments to any of the Chinese ports, nor is it likely to do so: on the contrary, a good effect will probably be produced. Up to the present time the exports to Canton have been small, but the opening of that port would doubtless be attended with great results, as large quantities of lead and nail rods are constantly in request over the greater part of the Celestial empire. The Mediterranean and Australian markets, as well as the Cape and Mauritius, have on the whole been moderately well supplied with metals. The demand for the Continent and home consumption has also proved satisfactory. The greatest inconvenience experienced by all parties is the long-continued tightness of the money market—a complete stoppage to everything, a source of painful anxiety and excessive loss to the mercantile community generally. However, a step has now been taken in the right direction, and we may safely congratulate ourselves that the beginning of this year wears a more cheerful aspect than we have witnessed for some long time past. It is now thought we have positively passed over the most critical period, sufficiently confirmed by the fact of the banks lowering their rates of discount. Until this took place there was but little chance of an amendment in trade. Whether the Government will be guided by past experience in enacting such laws as will in a measure prevent the recurrence of such a shameful system of business being carried on as the late failures have brought to light, without punishing the offenders, remains to be seen, but it is very clear that a man is not justified in trading excessively beyond his means—no honourable, honest man would do so. It is perfectly preposterous that business to the extent of several hundred thousands can be worked with a small capital of 5000*l.* or 10,000*l.*: the liabilities are outrageous, compared with the available capital, and the least difficulty that arises is likely at any time to necessitate suspension. The mode of payment continually by bills is rotten at the foundation—some time or other these bills must be met, and as soon as discounts increase holders then find out their mistake, that instead of having a *bona fide* document in their possession, it is often worth very little more than the value of mere waste paper. A man who puts his name to a bill without first being well assured that when it becomes due he will be able to take it up, is very little better than a swindler. So soon as the past year's accounts are closed, and merchants can turn themselves round, we do really think we shall have a most flourishing and prosperous trade. It may take some little time, perhaps, before great activity is evinced, but a good, sound, regular business seems almost inevitable. Stocks everywhere must be low—prices here are moderate—money will soon be getting very plentiful, and scarcely anything will offer a greater inducement to speculators, merchants, consumers, and dealers generally than a liberal investment in metals. In the first six months of the past year metals assumed a healthy appearance; increased enquiries sprung up for most kinds from all parts, and remunerative prices were obtained; but the foregoing events will sufficiently account for the depreciation that has since followed. Under their usual characters, we have described more particularly the circumstances by which they have been severally affected.

COPPER.—During the past year the price of this metal has fluctuated much more than of late years. In the beginning of January last prices were advanced to 14d., and on the 22d further increased to 16d., but at this figure comparatively little business was transacted, although this price was maintained until April 27, when a decline of 1d. per lb. was announced; also an increased allowance in discount, making the current price 14d. per lb., less 3 per cent. discount for cash. Nevertheless, the market continued to wear a drooping tendency, and on June 4 prices again receded to 13d. per lb., which caused the market quickly to recover from its former depression. The market continued to stiffen considerably, and difficulty was again experienced in getting supplied at the fixed rates, the usual precursor to a rise. Smelters, therefore, on June 26 raised prices ½d. per lb.; but as this was only a very moderate alteration, no objection was evinced to paying the extra charge—in fact, many dealers anticipated that a further rise would shortly be established; but they were somewhat disappointed, for after the lapse of a little time the demand abated, and the contracts they effected were likely to prove bad purchases. The inactivity reigning in our market became so evident that outside sellers were obliged to make large concessions to sell at all, and at last the smelters resolved to reduce manufactured descriptions 1¼d. per lb., and rolling and melting qualities 1*l.* per ton; yellow metal, 1¼d. per lb.; brass, only 1d. per lb. This last alteration in copper was delayed too long, and it will be remembered that we constantly urged the necessity of smelters making the price 12d. per lb., instead of obstinately refusing to sell in the market under 13½d., although known to have accepted orders 'at a less price, "under the rose." The consequence has been that large importations of foreign have taken place, and become burdensome, the quality of the principal part being equal to English, and a good deal very superior, which, being offered below smelters' rates, buyers of course give it the preference. The requirements at the present time are by no means excessive: it therefore follows that smelters are not likely to be very well off for orders, unless they secure the foreign in their own hands, which would doubtless require a change in the price of English to enable them to buy it at a low rate, and afterwards sell it at a profit. The price of English would then unquestionably be raised. We are so much accustomed to smelters regulating prices to suit their own books, that we should not be surprised if a decline were announced, merely for the above reason. We have no doubt, if prices had been reduced to 12d. some time previous to the date, that it would have retarded in a great measure shipments from America to this port. The public would always be better satisfied if prices were adjusted according to the fluctuations in the standard, which certainly would be the most equitable course that could be pursued. Let the average price of each sale of ores be always published, and an understanding to exist with the trade that a relative difference should be made in the manufactured article, either more or less based entirely upon the current value of the ores—that is to say, if ores were to decline 10*l.* per ton, then an approved reduction in cake, &c., to be made the day after sale of ores at public ticketings; and, on the other hand, when a rise in ores takes place, a proportionate increase to be made the day after in cake, &c. In this way speculators would not have so much opportunity allowed them of judging the tendency of prices, the smelters would not be subject to the annoyance of knowing that speculative capitalists are realising greater benefit by the changes than themselves—at the same time, providing the differences in price to be charged for copper, regulated by a fixed scale in proportion to the value of ores, agreed between the trade and the smelters, there could not possibly be any complaints arise about being overcharged, as buyers would in such a case feel assured that no benefit could be gained by smelters in maintaining prices beyond a legitimate point. The interest of the miner would also be protected by the smelters bidding irrespective of each other, both with regard to price and quantity. While the association adheres to the present system there will be nothing but grumbling on all sides; however a monopoly like this has existed so long in a country professing such extended notions of free trade is perfectly astonishing. If an amicable arrangement cannot be effected, the question resolves itself as to the advisability of bringing the subject of monopolies in trade before the administration. There has been a brisk demand for coke and ingots for the Continent, and the large consumption of this metal in Russia has led to several shipments to ports that we have often been supplied from; there have been no consignments of Russian to our market, and, with the exception of the last few months, all foreign qualities have been scarce. South American in quantity has exceeded other descriptions. For engineering and foundry purposes there has been an average enquiry. The Government and East India Company have required considerable supplies. Two or three of the small smelters have been compelled to make arrangements with the combination to relieve them of their works.

IRON.—The consumption of this metal appears to be rapidly on the increase in all parts of the world; and although a gloominess occasionally prevails, it is generally dispersed with a more brilliant prospect than has hitherto been exhibited. The constant requirements for railway purposes alone has now become so enormous, that it gives the ironmasters every assurance of an improvement in the trade. The opening of a main line invariably leads to branches, which again frequently are attended with further constructions. A glance at Teesdale's "General Atlas of the World" will at once convince anybody of the immense amount of work that remains to be executed in carrying out proposed lines, besides the daily wear and tear of those already formed. It is really astounding, when we survey the network of railways in England, the length of lines in America, India, and other parts, over the vast tract of land which they spread, that they could have been completed in so short a time. Besides the east and comfort of railway travelling, the locomotive power seems to be one of the greatest promotions of civilisation; nations are brought close together; intercourse of social habits, manners, and customs take place; commerce is extended; riches increased; facilities afforded of incalculable benefit—derived by the saving of time; and Christianity spread to remote regions, where, perhaps, otherwise it would never have reached: in short, railways are Wisdom's ways, roads to fortune, and lines of inexhaustible work for the labourer; a boon of inestimable value to society; undertakings that ought to be encouraged to the very utmost; and in places where it would not answer the purposes of a private company, Government should form them, and any deficiencies in the returns be paid out of a general rate, which could be levied upon the people in the same way as a tax for defraying the cost of the formation and keeping in good repair an ordinary road. Laying down rails in our main roads, so often referred to and advocated by this Journal, is a scheme of vast importance, partaking of great public benefit. Scarcely anything could be invented that would reduce the noise, regulate and quicken the traffic, relieve horses of burdensome loads, and tend to the ease of passengers riding in vehicles, than these tramways, wherever practicable, throughout the metropolis. It would be a great improvement upon the present jolting manner in which we are conveyed over the stones. Surely this is a meritorious enterprise, and deserves the co-operation of all concerned. Much opposition is now springing up against the London General Omnibus Company; but if they carry out with celerity this essential operation, and continue to demand only moderate fares, they will be clearly entitled to the entire patronage of the public, for one of the most useful and necessary achievements of modern times. We have telegraphs laid underground along our streets leading to many public offices, but there still remains much to be done by this means of communication. It would afford infinite service to have the various police stations united, as well as the coast guard. In time of riots and war it would prove invaluable. The cost of the wire would not exceed the expense attached to maintaining a reserve force, which of course could be partly dispensed with. At the present value of iron there is sure to be a good demand spring up—at least, whenever it has receded to about the current quotations it has been generally found to answer the purpose of shippers to consign large quantities, consumers to increase their stocks, and speculators to carry out their arrangements; we, therefore, see nothing for the iron masters to fear: with money getting cheaper confidence will be increased, and we do not hesitate to predict that the official returns of exports for the present year will exceed those of the past. Merchant bars have been in good request, and the shipments to most parts have been beyond the average of past years. The first six months of 1857 sellers obtained from 8*l.* 5s. to 8*l.* 10s. for forward delivery, f.o.b., here. Prices since then have gradually declined to 6*l.* 15s., at which figure several hundred tons have been sold. Sellers are now obtaining 2s. 6d. to 5s. per ton advance; and, considering the numerous enquiries for rails that are daily arising, which will probably end in orders, it necessarily follows that there will be a proportionate rise in the quotations for English merchant bars. The evenness of prices maintained in Staffordshire bars, hoops, sheets, &c., is very remarkable: until very recently scarcely any deviation for the last two years has been made by the first-class houses; and at the last quarterly meeting it was resolved the reduction should only be 20s. per ton. Merchants may take this as a fair criterion of the range of future prices, and to anticipate any further declension would, we think, merely end in disappointment. Several failures have taken place in this district, consequently many furnaces were blown out, and the production much decreased. Swedish bars, of Indian specifications, have been sold freely at 14*l.* 10s. to 15*l.* 10s., but they can now be bought at about 13*l.* 10s. to 14*l.* 10s. Several parcels being held by some of the firms lately failed are for the present withdrawn, until their affairs are thoroughly inspected and arranged. Scotch pigs nearly throughout the year commanded remunerative prices, the average price being 69s. Nevertheless, the monetary pressure operated unfavourably, prices rapidly declining, the lowest price that transpired, at which business was transacted, being 48s.; but a speculative feeling set in, and higher prices at once obtained. There still exists a desire to operate, and sellers are now firm at 56s. 6d., m.n., cash, g.m.b., f.o.b., in the Clyde. Stocks have accumulated to 170,000 tons. Old rails have changed hands readily at 5*l.* 10s. to 5*l.* 15s., f.o.b., in London, but a slight pause ensued at the close of the year, and lower prices quoted. The market is now firmer, and former rates are not unlikely to be realised. Old scrap iron has been disposed of without difficulty, shippers being open for almost any quantity that could be procured.

LEAD.—The smelters have had no reason to complain of business; there has been a very satisfactory demand, and fair prices have been obtained. The Chinese markets and the East India shipments form a considerable outlet for this metal. In many cases the Chinese merchants now order very thin sheets, known as tea lead, used for lining tea chests: in buying in this way there is no fear of their having anything but what is really good, for it must be of soft quality to bear rolling out to such a thinness, and if the expense is not greater than the cost of rolling the pig-lead in China, it is likely they may order their supplies in future quite prepared for use. America has very much fallen off; exports lately have been completely stopped, and in their place we have had several parcels arrive from New York, but the whole quantity is not deemed of sufficient importance to interfere much with the market. At the same time, this metal has held a very unpromising position for the last few months, and anything to swell the accumulating stock will naturally aggravate the matter; prices from day to day have been quite nominal, and so little business has been transacted that no quotation could be established, or stated to be the correct price of the day. In Liverpool, good soft brands have been offering at 21*l.*, but sellers here are rather higher in their demand. Sales of Spanish have been reported at very good prices, and, compared with current rates of English, must be encouraging to importers.

SPELTER.—Nearly all the principal consumers have adopted the plan of purchasing the greater part of their requirements direct from the German houses, in Hamburgh and Stettin, thereby interfering materially with the business of many merchants here in this trade; transactions, therefore, frequently take place that are unknown in London at the time, shipments also being arranged mostly for buyers' boat, consequently a considerable amount of traffic is turned from its original channel. The charges for warehousing, &c., is probably, in a great measure, detrimental to sellers holding in London, and partly accounts for the limited stock that is kept here, buyers finding they have at least the advantage in their favour of saving these charges, and, of course, are only too ready to avail themselves of the benefit. If some of the wharfingers would be satisfied with a lower scale of charges—say, a consolidated rate, to include landing, weighing, warehousing, delivery, and rent for 12 months or more, at about 5s. or 6s. per ton, the expense of having a few thousand tons extra in warehouse here would then not be considered an object; although there would be less profit to the wharfingers on a single parcel, yet in the long run they would most likely be gainers. We recommend the trial as being conducive to a more extensive business, and, perhaps, be the means of retrieving that which has passed from us. After buyers once get in the way of buying on the other side, it is difficult to draw them out of the course, and to effect it favourable terms are indispensable. Enquiries for export have been limited, the high prices mostly operating against shippers making consignments, or consumers increasing their stocks. However, lately holders have accepted lower rates, and contracts are reported at 21*l.*, f.o.b. in Hamburg. Since then the market has advanced, 23*l.* 15s. having been paid in warehouse here, and 24*l.* is now quoted by sellers. Enquiries continue very limited, especially for shipment, but it is improbable prices will go much lower, as the Vieille Montagne Zinc Company doubtlessly will be large purchasers, if quotations recede 2*l.* or 3*l.* per ton, to give a better appearance to the market, and enable them to maintain higher rates for sheet-zinc. The stocks here at no time during the past year have been large, and the return issued on the 1st inst. stated the quantity then did not exceed 2291 tons. Zinc sheet has fallen 20s. per ton—present price quoted 34*l.* per ton.

TIN.—About three months at the commencement of the past year prices were extremely dear, the price of English blocks being 146*l.*; but as the approach of the Dutch sale drew near, sellers reduced their rates to 130*l.*, thinking that the large quantity that was offered for sale might influence buyers, and cause them to abstain from buying, instead of which there was such an excessive demand that it was stated orders would be reduced one third. Under such an unexpected turn, smelters declined selling for a few days, but soon after fixed the current rates at 140*l.* for English blocks, prices remaining without alteration till November, when a rapid decline ensued, the last fall, in Dec., bringing the market quotation to 108*l.*, being the present quoted value. The demand has somewhat improved, but nothing particular has occurred to lead us to expect any recovery at present in prices current. Banca and Straits have both been subject to a good deal of fluctuation in value, to such an extraordinary extent that at one time quotations for Banca were as high as 151*l.* to 152*l.*, and lately as low as 98*l.* to 100*l.*, Straits generally bearing a proportionate difference in price. The cheapness of the article has at last attracted the attention of speculators, and several transactions are named, the price for Straits varying from 95*l.* to 100*l.*, according to the terms of payment; several parcels that were offering in our market previous to the improved feeling have since been withdrawn, and the appearance of the metal is now more flattering than since prices began to droop. Stocks have rather accumulated here of Banca and Straits. In Holland, advices are better, and Banca has assumed an upward tendency; price nominally 63 fls.

TIN-PLATES.—At very high prices makers have mostly been enabled to sell their commodities, and our market has been characterised by remarkable steadiness until within the last five or six weeks, when a rapid decline of about 10s. per box in coke and charcoal ensued. On account of the extravagant prices that have prevailed speculators have been extremely cautious in their operations, and comparatively few contracts have been passed for them; second-hand parcels, consequently, are scarcely to be met with. Some common coke brands have changed hands at 26s. 6d. per box, but since prices advanced 1s. to 1s. 6d. per box; although some brands are still obtainable at 26s. to 26s. 6d., the majority of sellers quote 27s. to 28s. per box. Many of the manufacturers just now have much reduced their make, not only on account of the diminution in the demand, but in consequence of stock-taking, and, therefore, at the moment appear rather indifferent about further orders; but if we take into consideration the reduced value of tin, iron, &c., we think prices have yet to recede, and although there may be a slight resuscitation, we cannot place much reliance upon it being permanent; we rather look forward to lower rates, unless the raw materials increase very much in value. They are now above the average price, and but few dealers are disposed to increase their stocks in any great degree, unless a considerable turn in price is conceded. At about 24s. per box no doubt a large business might be transacted, and we hope makers, if practicable, will sell readily at this price, if it be simply to effect a substantial movement.

STEEL.—A very fair business was transacted in English until the latter part of the past year, when, with other metals, a general stagnation took place, but scarcely any declension in value of the various descriptions has followed. The American panic has much interfered with the Sheffield manufacturers, and the capitalists of the principal establishments have suffered acutely in a pecuniary point of view by the suspension of their American connections, and the cessation of demand for Sheffield ware in New York, &c. The renewed activities about to take place in railways will doubtlessly prove of great benefit to the trade generally, and ere long we shall probably see an improved enquiry. Swedish keg has been in request, and mostly sold for arrival at 21*l.* 10s. to 22*l.*, hammered quality; rolled, 18*l.* to 21*l.*; the demand for the latter quality is very limited, most shippers preferring to pay the extra price for hammered. The fact of some very bad imitation Swedish steel (rolled) being manufactured in Sheffield and sent to India, has caused complaints to be sent home respecting rolled qualities, consequently has greatly prejudiced dealers against the real Swedish steel (rolled); the present value is 17*l.* to 18*l.*; a large parcel could be bought at 17*l.* per ton. Swedish fagots have been difficult to meet with, and the principal portion sold here has realised 23*l.* to 24*l.* per ton.

QUICKSILVER.—The first few months of the past year nothing occurred to disturb the equanimity of our market, the demand for the most part continuing extremely steady, and the prices ruling without variation at 1s. 9d. per lb. The attention of shippers, in about April last, was attracted by the smallness of stock, the diminished exports, and the upward tendency in prices, which induced many to effect purchases. The market immediately became buoyant, and holders for about two months hesitated as to the price to be fixed, and declined, in most cases, selling in any quantities; however, a few contracts were passed at 2s., and also some subject to the price to be determined upon by sellers, after which 2s. 4d. per lb. was paid for small lots. Since then the price has gradually receded to 2s. per lb., being the quotation of to-day, our market closing without animation. During the past year the importations have not exceeded 5000 bottles. The very great falling off in shipments lately would almost seem to recommend merchants buying at the present time; but little risk apparently would be attended in making a few consignments.

TIN-PLATE TRADE.—The quarterly meeting of tin-plate manufacturers was held at Gloucester, on Wednesday (Mr. Philip Woodruff in the chair), when the following resolutions were passed:—

"This meeting recommends the price of tin-plates to be fixed at 34s. for IC charcoal, at the shipping ports; and it further strongly recommends the reduced make to be continued in the same ratio as at present, as a sure means of early returning to a remunerative standard in prices."

"That this meeting recommend that the credit on tin-plates be reduced for the uture from six months to four months."

LIVERPOOL, JAN. 7.—We have to report a continued better feeling in our metal market, with prices of some articles on the advance. Welsh Bar-iron is in increased request, and makers are demanding higher rates. General descriptions of Staffordshire Iron, also, are more enquired for, and prices are steady. In Scotch Pig-iron, prices have taken an upward tendency, having advanced 4s. per ton during the week. The growing ease in the money market has somewhat induced speculation, and there has been more enquiry for parcels on time. The shipments for the week are 9494 tons, against 4383 tons for the corresponding week of last year. Tin, Copper, and Lead are in moderate demand. Tin-plates somewhat firmer, and the feeling favourable to an advance. The following are the quotations:—Iron: Merchant bar, 6*l.* 15s. to 7*l.* per ton.—Tin: Common block, 108*l.* per ton; common bar, 109*l.*; refined block, 111*l.*—Tin-plates: Charcoal, IC, 32s. to 33s. per box; coke, IC, 26s. to 27s.—Lead: English sheet, 23*l.* per ton; English pig, 22*l.*—Copper: Cake and tile, 107*l.* 10s. per ton; best selected, 110*l.* 10s. per ton; sheathing and bolt, 1s. per lb.—Yellow metal sheathing, 10d. per lb.—Steel: Blistered, 30*l.* to 40*l.* per ton; spring, 18*l.* to 24*l.*; cast and shear, 50*l.* to 60*l.* per ton.

GLASGOW, DEC. 7.—There has been a strong market for pig-iron this week, considerable desire to buy having been manifested, in spite of the expected adverse influence of the annual reports. Prices of warrants were run up until they touched, yesterday, 56s. 6d. for prompt cash, 59s. to 59s. 6d. three months open. The advance has not been wholly sustained, business having been transacted to day to some extent at 58s., at which, however, the market closes steady. No. 1, Gartsherrie, 59s. 6d. to 60s.; No. 1, g.m.b., 56s.; No. 3, g.m.b., 53s. 6d.

PARIS, JAN. 7.—The money and share market is steadily improving, and there is every reason, or if not reason, strong hopes that the amelioration will be sustained and extend further. In the metal market prices are maintained, in consequence of the limited production through the continued failure of water-power. Several furnaces were to have been re-lighted at the commencement of the year, but their owners have not been able to do so from this cause. Numerous orders have, however, been given lately for Champagne forge-pig at 6*l.* 4s. 2d. per ton; but the orders for rolls at from 12*l.* 16s. 8d. to 13*l.* 4s. 2d. the ton, in any of the eastern railway stations, and for forge-irons at 14*l.* 16s. 8d. in the stations nearest the works, are few and far between, and by no means important. Chain is quoted at 28*l.* 16s. 8d. the ton, mixed numbers, delivered in Paris; where the prices of Champagne and Burgundy irons are, for the present month, 12*l.* 16s. 8d. to 13*l.* 4s. 2d. the ton. Nail rods have fallen 16s. 8d. a ton, to 12*l.* 16s. 8d. The prices of other metals have not varied, with the exception of lead, which has followed the reduction of the English market. During the past year refinery-pig has varied from 6*l.* to 6*l.* 16s. 8d. the ton; castings, from 6*l.* 16s. 8d. to 7*l.* 8s. 4d. the ton; rolls, from 12*l.* 16s. 8d. to 13*l.* 12s. 6d. the ton; and hammered irons, from 14*l.* to 14*l.* 16s. 8d.

MINES.—The mining share market has taken a decided turn for the better this week, for not only has a large amount of business been transacted, but prices have generally advanced, and with the steady demand for all kinds of shares a still further rise is looked for in many descriptions which have been so long depressed. One or two mines are looking better, though at present no grand discoveries have been made to give excitement to the market. Tin is getting more in demand, and as the money market gets easier a better price is looked for in all metals; owing to the fall in them having so seriously affected the profits of the mines, a reduction of 15 to 20 per cent. has been made in wages throughout the mining districts, and the late "setting" days, we understand, passed off well, though not without some grumbling at first. This reduction, where a mine pays 1000*l.* to 2000*l.* per month for labour, is an important item of saving, in addition to the reduced cost of merchandise.

The greatest demand during the week has been for Trelawny, East Basset, Basset, Tolvadden, West Basset, North Basset, Wheal Edward, Grenville, Great Alfred, Hender, South Caradon, West Caradon, Herodsfoot, and a few others of a more speculative class. South Frances shares are flat, at 200 to 220; at the meeting, the accounts showed a profit of 3485*l.* 0s. 8d. for the two months, and a dividend of 7*l.* per share was declared, leaving 450*l.* 12s. in hand; the report of the mine is not so favourable, and as it is understood that proceedings have been commenced against West Basset in regard to the disputed boundary, shares may be flatter on that account. West Basset shares have improved, and have been in considerable request at 24 to 25; North Basset also in demand, and the price advanced to 14, 15, owing to an improvement at Grace's shaft; East Basset has considerably improved in the 60 east, and shares largely dealt in, at an advance to 97, 100. Grambler and St. Aubyn, 80; at the meeting, the dividend was 1*l.* per share. Rosewarne shares have been more in request, at 20 to 25; the mine is improving in the western part, where discoveries have been for some time looked for. Hender also sought for, at 2 to 2½; North Frances, 10 to 10½; Devon Great Consols, 420 to 425; Mary Ann, 44 to 45; Trolawny have been very largely dealt in, at 26½ to 27½, and still in demand; Herodsfoot, 7 to 7½; West Caradon has improved, and shares enquired for at 105 to 110; Wheal Edward advanced to 7½, 8, but leave off at 7½ to 7¾. Great Alfred early in the week rose to 4½, 5, leaving off at 4½; this rise was owing to an improvement in the winze sinking below the 170, and before the 180 end. West Alfred Consols, 30 to 32½; Alfred Consols have been flat at 12, but left off firmer, at 12½ to 12¾; Margery, 7 to 8, and in demand; Grenville, 1⅞ to 1⅞; West Grenville, 4s. 6d. to 5s.; Tolvadden in demand, at about 6; Clijah and Wentworth, 6 to 6¼; East Gunnis Lake, 1¾ to 1¾; Great Baddern, ⅞; Hingston Down enquired after, at 4 to 5; Bedford United, 6 to 6¾; Basset shares have been in request, at 145 to 150; St. Day United, ¾;

Redmoor, ⅞; South Caradon, 340 to 350; Great South Tolgus, 15, and the mine much improved; Sortridge Consols, 1½; South Carn Brea, 4 to 5; West Frances, 15 to 16; Wheal Kitty (Lelant), 11 to 12; Condurrow, 80 to 85, flat; Dolcoath, 200 to 250. Garreg, ¼ to ⅜, and in considerable demand, the mine having very much improved, and the demand for shares being chiefly from the neighbourhood of the mine. East Russell, 2¾ to 3¼; North Robert, 3 to 3½. West Rosewarne has improved in the 30 east, lode worth ⅛ ton per fm., but nothing doing in shares.

The stoppage of mines and collieries is beginning to tell most seriously on the commerce of the country: a vast number of ships are laid up belonging to St. Ives, Hayle, Devoran, &c., there being no coals obtainable at Cardiff, by the strike; and for coals at the mines from Swansea there is only a small demand; whilst copper ore is only obtained as a return freight by a few old favourites. Numbers of sailors are thus thrown out of employment; and if mining does not revive greast distress will prevail throughout the coasting shipping trade. The mines in the St. Ives district generally are looking well, and had prices kept up, would have been flourishing.

Mining Exchange Official List of transactions during the week:—

SATURDAY, JAN. 2.—Lady Bertha, 17s. 6d. to 18s. 6d.; North Basset, 13⅞; Pendeen, 3¼ to 3½; Wheal Margaret, 42¼; Wheal Trelawny, 25¾ to 26¼.

MONDAY.—East Basset, 91½ to 93; East Russell, 3, 3 1-16, 3⅛; Great Alfred, 4½ to 4⅝; Lady Bertha, 17s. 6d., 18s. 6d., 17s., 18s.; North Frances, 10 to 10½; Pendeen, 3½ to 3¾; Sortridge Consols, 1l. 8s. 9d., 1½; Tamar Consols, 19s., 18s. 6d., 19s., 20s.; West Alfred, 35 to 37½; West Grenville, 4s., 4s. 6d., 4s., 4s. 3d.; Wheal Edward, 7⅛ to 7⅜; Wheal Mary Ann, 44¼ to 44¾; Wheal Trelawny, 25¾, 26¼, 25½, 26, 25⅝, 25½, 26½.

TUESDAY.—East Basset, 91½ to 93; East Russell, 3 to 3⅛; Lady Bertha, 16s. 16s. 6d., 17s.; Pendeen, 2⅞, 3, 3¼, 3½; Sortridge Consols, 1⅛; Wheal Trelawny, 26½, 27, 26½, 27½, 26, 26½.

WEDNESDAY.—Devon Buller, ⅜ to ¾; East Basset, 95 to 97½; Herodsfoot, 7 to 7½; Lady Bertha, 16s. 6d. to 17s. 6d.; North Basset, 13½ to 14½; South Caradon, 347½ to 352½; Virtuous Lady and Bedford, 1¼ to 1⅜; Wheal Edward, 7⅛, 7⅜, 7⅜, 7⅜; Wheal Trelawny, 27 to 27½.

THURSDAY.—Alfred Consols, 12, 12¼, 12⅛; East Basset, 100; East Gunnis Lake and South Bedford, 33s., 34s., 35s.; Herodsfoot, 7 to 7½; Wheal Edward, 7⅜ to 7⅛; Wheal Trelawny, 27 to 27½.

FRIDAY.—Hender, 2; Lady Bertha, 16s. to 16s. 6d.; North Frances, 11½ to 12; Sortridge Consols, 28s., 29s., 30s., 26s., 27s., 30s.; South Frances, 202½ to 205; West Basset, 24½ to 25½; West Grenville, 4s. 6d.; Wheal Trelawny, 27, 27¼, 27¾.

On the Stock Exchange, the following business has been transacted:—

SATURDAY, JAN. 2.—Devon Great Consols, 425; Wheal Edward, 7⅛; St. John del Rey, 12⅛; Mariquita, ¾; Santiago de Cuba, 2⅛; United Mexican, 4⅛, 4⅜, 4⅜.—Transactions, though not officially marked: Wheal Edward, 7¼; Sortridge Consols, 1⅛ to 1⅜; Wheal Russell, 3⅛; North Basset, 12; West Basset, 21½ to 22.

MONDAY.—Alfred Consols, 12 to 12¼; Great Wheal Alfred, 4⅜; Lady Bertha, 1; North Frances, 10; Sortridge Consols, 1⅛; Wheal Edward, 7⅜ to 7⅛; St. John del Rey, 12¼, 13, 12¼; Mariquita, ¾; Pontgibaud, 4¾; Santiago de Cuba, 2⅛ to 2¼; United Mexican, 4⅛ to 4¼.—Transactions, though not officially marked: West Frances, 10 to 11; Great Alfred, 4¼ to 4¾; Vale of Towy, ⅜; Wheal Trelawny, 26; Wheal Mary Ann, 45; Wheal Zion, ⅛.

TUESDAY.—Alfred Consols, 12¼ to 12; North Frances, 10⅛; Wheal Edward, 7⅜; Wheal Trelawny, 26 to 27.—Transactions, though not officially marked: North Frances, 10½ to 11; Pendeen Consols, 3 to 3⅛; Wheal Edward, 7⅛ to 7¾; Providence, 62 to 65; South Carn Brea, 4¼; Virtuous Lady, 1¼; Vale of Towy, ⅜; North Basset, 12½ to 13; West Basset, 22 to 23; West Fowey, 7½ to 8; Sortridge Consols, 1⅜ to 1½; Lady Bertha, ⅞.

WEDNESDAY.—Great Wheal Alfred, 4⅛; Wheal Edward, 7⅜ to 7¾; Wheal Trelawny, 27⅛; Australian, ⅞, 1¼, 1; United Mexican, 4⅛.—Transactions, though not officially marked: North Basset, 13; West Basset, 23; North Frances, 10¾ to 11; Wheal Edward, 7⅜ to 7⅝; West Fowey, 7⅛; Great Wheal Alfred, 4⅛; East Russell, 3⅛; Wh. Kitty (Lelant), 12; Pendeen Consols, 3⅛; East Basset, 97⅛, 100.

THURSDAY.—Alfred Consols, 12¼ to 12¾; Great Wheal Alfred, 4⅛ to 4⅛; North Wheal Basset, 14¼ to 15; Australian, 1 to 1⅛; Cobre Copper, 44¼, 45, 44½; General Mining Association of Nova Scotia, 16½; United Mexican, 4⅜.—Transactions, though not officially marked: North Basset, 14 to 15; West Basset, 23½ to 24½; North Frances, 11 to 12; East Basset, 95 to 100; Wheal Edward, 7⅛ to 7¾; Great Wheal Alfred, 4¼ to 4¾; Lady Bertha, 17s.; Sortridge Consols, 1⅜.

FRIDAY.—North Frances, 11 to 11½; Bon Accord, ⅛; General Mining Association of Nova Scotia, 16⅛.

Antimony ore is now worth from 17l. to 19l. per ton; crude, from 35s. to 36s. per cwt.; regulus, 50s. to 55s.; and French star, 55s. to 58s. per cwt. Comparing these figures with the prices current of the corresponding week of last year, it appears that while the price of ore has not varied, crude has fallen 5s. to 6s. per cwt., and regulus is from 10s. to 15s. per ton lower.

At Redruth Ticketing, on Thursday, 3492 tons of ore were sold, realising 18,977l. 5s. 6d. The particulars of the sale were—Average standard, 126l. 8s.; average produce, 6⅝; average price, 5l. 8s. 6d.; quantity of fine copper, 226 tons 1 cwt. No sale on Thursday next.

At Swansea Ticketing, on Tuesday, 1433 tons were sold, and realised 22,233l. 12s. 6d. Of this, 920 tons Chili fetched 15,125l. 2s.; 293 tons Berehaven, 2866l. 17s.; 133 tons Del Soto, 2566l. 17s.; 61 tons Holyford, 924l. 0s. 6d.; 16 tons Canadian, 569l. 16s.; 10 tons Kanmantoo, 181l. The 354 tons of British averaged 10l. 14s. per ton, the produce being 11 7-16; and the foreign 17l. 2s., produce 18⅞: consequently, the average produce of the whole sale was 17 1-16, and the average price per ton 15l. 10s. The sale on Jan. 19 will comprise 1209 tons of ore, from Springbok, Wheal Maria, Cobre, Berehaven, Sydney, and Namaqua. One parcel purchased by Messrs. Freeman and Co. (74 tons from Berehaven, for 769l. 12s.) was for the Pocket Nook Company.

At South Wheal Frances meeting, on Monday, the accounts showed—Balance last audit, 437l. 11s. 4d.; ore sold, 7159l. 15s. 4d.=7597l. 6s. 8d.—Mine cost, October, 1211l. 0s. 7d.; Nov., 1104l. 17s. 5d.; merchants' bills, 749l. 6s. 2d.; dues, 477l. 6s. 4d.; rates, 129l. 4s. 2d.: leaving balance in favour of mine, 3922l. 12s. A dividend of 3472l. (7l. per share) was declared, and 450l. 12s. carried to the credit of next account. The profit on the two months' working was 3485l. 0s. 8d. Captains W. Pascoe, J. Prisk, and H. Bennetts, reported that in the tribute department they had 23 pitches working, at an average of 6s. 4d. in 1l.

At the Mining Company of Ireland meeting, on Thursday, a very satisfactory report was presented. A dividend at the rate of 17½ per cent. per annum was declared. The nett profit for the year was 14,001l., and a large sum had been expended on works.

At Grambler and St. Aubyn Mine meeting, on Tuesday, the accounts showed—Balance last audit, 92l. 2s. 1d.; ore sold, Oct. (less dues), 1042l. 6s. 10d.=1134l. 8s. 11d.—Mine costs and merchants' bills, Oct. and Nov., 778l. 1s. 10d.: leaving balance in favour of mine, 356l. 7s. 1d. A dividend of 243l. (1l. per share) was made.

At West Porkellis United Mines meeting, Dec. 17, the accounts showed—Balance last audit, 13l. 4s. 8d.; mine costs and merchants' bills, for Aug., Sept., and Oct., 173l. 13s. 10d.; calls received, 102l. 8s.: leaving balance against adventurers of 84l. 10s. 6d. A call of 4s. per share was made. Capts. W. Rosewarne and G. Reynolds report:—Since the last meeting we have driven the adit and cross-cut 19 fathoms further south of Taylor's shaft, and intersected the new lode, and holed new shaft on this lode, cut plat, &c. The adit end east on this lode is driven 6 feet, lode 2½ ft. wide, producing tin, with every appearance of an improvement. The adit end west is also driven about 6 feet; lode 6 feet wide; broke from this lode to day, about 7 in. wide, a sample which when assayed produced tin worth 2l. 9s. 6d. per barrow, computed at 55l. per ton; and consider the prospects of the mine improving, and have no doubt the lodes will be more productive as they are extended on.

At the Drake Walls Mining Company meeting, yesterday (Mr. W. J. Dunsford in the chair), the accounts showed a balance in favour of the adventurers, 297l. 8s. 9d. Messrs. Bayley, Betteley, Dunsford, Gill, and Little were appointed the committee of management, and the proceedings, which are reported in another column, terminated with a vote of thanks to the Chairman.

At the West Par Consols Mining Company special general meeting, on Thursday (Mr. S. W. Daukes in the chair), the accounts showed a balance in favour of adventurers, 143l. 16s. 5d. The reports, which appear *in extenso* in another column, were adopted. Resolutions were passed to take proceedings against shareholders in arrear of call, and to restore certain shares upon registration and payment of arrears. A vote of thanks to the Chairman terminated the proceedings.

At South Wheal Ellen meeting, on Tuesday, the accounts showed—Balance of division of cost from last audit, 1l. 5s.; mine costs and merchants' bills, Oct. and Nov., 915l. 3s. 9d. = 916l. 8s. 9d.—By ores sold, &c., 405l. 6s. 8d.: leaving balance against adventurers, 511l. 2s. 1d. A call of 10s. per share was made.

At the Oola Mining Company special meeting, on Monday (Mr. G. F. Eland in the chair), it was resolved that all shares in arrear of call should be forfeited.

At West Wheal Jane meeting, on Wednesday (Mr. Clemow in the chair), the accounts showed—Mine cost, Oct., Nov., and Dec., 820l. 5s. 2d.; merchants' bills, 358l. 8s. 3d.; unpaid merchants, forfeited shares, &c., 774l. 16s. 5d.=1953l. 9s. 10d.—Balance last audit, 1061l. 17s. 9d.; ore and sundries sold, 599l. 1s. 10d.: leaving balance against mine, 292l. 10s. 3d. A call of 1s. 6d. per share was made.

Lord Viscount Falmouth has headed the subscription list for a testimonial to Capt. Pascoe, of the Great Wheal Busy United, with a donation of 10l.

North Wheal Robert is much improved; the 30, west of eastern shaft, being worth 2½ tons per fm.; the winze under the 42, at the western mine, 2 tons.

West Rosewarne is looking better than it has done since the present company began working. In the 30 east two lodes have come together, and look very promising, already worth ⅛ ton per fm. The shaft is nearly down to the 50.

Nanteos and Penrhiw is looking very well.

In the Foreign Mines Share Market, during the week, a very decided improvement has taken place, not from any reports which may have been received from the different mines, but in a great measure from the low price at which they were to be procured. Cobres left off at 44 to 46, an advance of 6l. in four weeks. At the meeting which is called for Jan. 26 a good report is anticipated. Santiago's, since last week, have been in request lt from 2 to 2¼. Copiapos firmer, leaving off at 12 to 13. The United Mexican half-yearly meeting is fixed for Jan. 27; shares which had been much in demand in the beginning of the week, left off flat at 4⅛, to 4¼. St. John del Reys have further improved, leaving off at 12½ to 13⅛. Pontgibaud, nominal price 4½ to 5½; the returns amount to nearly 4000l. per month, and when the next report is issued, the position of the company will, it is confidently anticipated, be found in a very satisfactory position. Linares shares have also rallied, and left off at 8⅛ to 9, ex div. Worthings not much doing, the next mail is anxiously looked for. In Chancellorsvilles business has been done at 1s. 3d. to 1s. 9d.; the works at Frodsham are reported to be in abeyance. General Mining Association (Nova Scotia) shares still continue to advance, leaving off—Old shares, 16; New shares, 5⅛ to 6⅛. New Grand Duchy of Baden are quoted at 1, and no sellers. At the Strathalbyn meeting, on Wednesday, additional capital was authorised to be raised, which will, it is anticipated, bring this mine into a flourishing condition. In Bon Accord shares good business done at par. Australian Mining shares have not so fully maintained the advance, and left off at 1 to 1¼. The market, on the whole, is in a satisfactory condition.

At the Burra Burra Mine (South Australian Mining Association) half-yearly meeting, at Adelaide, on Oct. 21, 1857 (Mr. Wm. Peacock in the chair), the report informed the shareholders that the prosperity of the association continues undiminished, and that the operations of the past half-year have been attended with more than ordinary success. The yield of the mines for that period amounted to 5724 tons of ore, of an estimated average of 24 per cent. of copper, being an excess of 364 tons on the raisings of the previous six months; while the produce of the last "take" exceeds that of any other during the last six years. Considerable fluctuation in the price of copper has taken place since the last meeting, the latest quotation in the London markets being 117l. per ton. The directors have made arrangements with the English and Australian Copper Company for smelting the ores for a short period, and are now awaiting the decision of the London board of that company before completing an agreement for a term of years. The profit and loss account on September 30 shows that, after writing off the last two dividends, there is a sum of 40,894l. 12s. 1d. of ascertained profit for division among the shareholders. The directors propose paying the usual dividends of 5l. per share (100 per cent. on the capital) on Dec. 2 and March 3 next. The statement of liabilities and assets shows the association's financial position on Sept. 30. It may be observed that many of the items are based upon estimation, and, therefore, the result shown may vary with the change of markets. The valuations have, however, been carefully made, and there is no reason to doubt their ultimate realisation, in which event there will be a further profit of 52,306l. 12s. 9d. to add to the sum of 40,894l. 12s. 1d., before mentioned—making a total undivided profit of 93,201l. 4s. 10d. In the belief that these figures will give entire satisfaction to the shareholders, the directors consider any further remarks on this subject unnecessary. Captain Roach reported that the numerous pitches at Kingston's, Graham's, Paxton's, and Stock's shafts, now too numerous to particularise, are looking favourable throughout. Ore raised since last "take," nine weeks, 2000 tons.—Karkulto Mine: The engine-shaft and boiler-houses were completed, and the engine partly fixed, and would, he hoped, be at work by the end of December next. The Chairman stated that, with a view to prosecute the workings in the deep levels, and to proceed with the sinking of Schneider's shaft, the directors have ordered from England another very powerful pumping-engine, which is expected to arrive early in the ensuing year, and will be fixed at Morphett's shaft, as the ore ground is now rapidly extending in that direction. A considerable increase has taken place in the number of hands employed, the total establishment being 909.

At the Strathalbyn Mining and Smelting Company extraordinary general meeting, on Wednesday (Mr. T. Winkworth in the chair), a resolution was passed for raising 6000l. by way of mortgage—3000l. immediately, to meet present contingencies. The proceedings, which are reported in another column, terminated with a vote of thanks to the Chairman.

The Melbourne advices mention the shipment, by sailing vessels, of a very large amount of gold for England. The total is 704,000l., and the particulars are as follows:—

	Sailed.	Period at sea.	
Marco Polo	Oct. 24	72 days	73,704 ozs.
Northumberland	Oct. 28	68 days	46,881 ozs.
Oliver Lang	Nov. 15	50 days	47,442 ozs.
Austral	Nov. 15	50 days	8,309 ozs.=176,336 ozs.

The *Suffolk*, from Melbourne, has brought 2287 cakes of copper.

At the Netherlands Land Enclosure Company meeting, on Thursday (Mr. T. Moxon in the chair), Mr. G. Fasson (the secretary) read the report, which stated that the meeting was to confirm the financial scheme approved of at the special general meeting of the company on Nov. 6, 1857, to raise additional capital to the extent of 100,000l. Resolutions were passed that the amount be raised upon obligations of the company for 10l. each, to bear interest at the rate of 7 per cent. per annum, payable half-yearly at Amsterdam and London on coupons attached—the issue of such obligations to be limited to an amount not exceeding 1200 fl. per hectare (40l. per acre) on the area of land actually enclosed. The holder of the obligation to have the option of paying it as cash for any land purchased of the company—the obligations to be paid in four instalments of 2l. 10s. each, but parties preferring paying up to receive interest from Jan. 15. It was stated that the security was very excellent, as the land was only estimated at 49l. per acre, when, in fact, it was worth 60l. The Chairman having resigned in favour of Mr. Bidder (the engineer), as calculated to benefit the undertaking, a vote of thanks was passed to him.

The English and Australian Copper Smelting Company are in negotiation with the Burra Burra Company for smelting their ores, as according to the last advices from Australia the latter company have made a provisional agreement with them, and were awaiting the answer of the London board of the English and Australian Copper Smelting Company as to whether they would accept the terms proposed for a period of years.

The Wicklow Copper Mining Company have convened their general meeting to be held in Dublin on Thursday.

In the matter of the Dhurode Mining Company, the Master of the Rolls has convened a meeting on Tuesday for appointing an official manager.

The Mizen Head Mining Company is in course of winding-up, and the mines will be sold on Feb. 3 next. An important question has arisen as to a number of shareholders who had not paid their calls, who alleged that their shares were forfeited, and that they ought to be struck off from the list of contributories. The Master of the Rolls was of opinion that they ought to be on the list, which has been confirmed on appeal to the Lord Chancellor of Ireland and the Lords Justices. The question is now settled, and will have the effect of placing the whole of the shareholders on the list of contributories, instead of confining the liabilities to a few, being those who had paid up all their calls.

Our Sheffield correspondents (Messrs. F. E. and S. Smith) advise us that business has been done in Chapel Dales at 5l. prem.; Eyam at 55; Mill Town at 3¼ to 3⅛. The following are the closing quotations this day:—Brightside, 3¼ to 3¾; Chapel Dale, 4¾ to 5 prem.; Crafnant, 1 to 1⅛; Eyam, 54 to 56; Mill Town, 3 to 3¼; Mill Dam, ⅛ to ¾ prem.; North Derbyshire, 1¼ to 1¾; Peak United, 2 to 2⅛; Prince of Wales, 2¼ to 2½; Stoney Way, 1 to 1½ prem. Local stocks in good demand, at improved prices.

Our Hull correspondents (Messrs. T. W. Flint and Co.) report that the price of railway shares had been advancing throughout the week until Thursday morning, when a slight reaction took place. The feeling, however, is still in favour of a rise, and on a decline there will be numerous buyers.

The *Midland Counties Herald* of Thursday says, "There have been some changes since our last, bearing upon the trade of Birmingham, especially the electro-plate manufacturers. Mr. Hussey Vivian (Vivian and Sons) has recently entered into the greatly-increasing German silver trade, on an extensive scale; the makers have reduced the price of that metal 2d. per lb. for best qualities, and 1d. per lb. for common. The price of nickel has also been reduced 1s. per lb., making the present price 5s. per lb. The price of copper promises to be steadily maintained, an improved demand being expected."

SCOTCH PIG-IRON TRADE, 1857.

Stock on hand—January 1, 1857	Tons 120,000	
Production during 1857	918,000	=1,038,000
Shipments—Foreign	294,232	
ditto coastwise and by railways	239,500	
Local consumption	314,261	= 848,000
Stock on hand—January 1, 1858	Tons	190,000

FURNACES IN SCOTLAND.

Name.	Proprietors.	In blast.	Out.	Total.
Gartsherrie	William Baird and Co.	15	1	16
Dundyvan	John Wilson's trustees	5	3	8
Monkland	Monkland Iron and Steel Company.	9	—	9
Clyde and Quarter.	Colin, Dunlop, and Co.	6	3	9
Coltness	Coltness Iron Company	9	—	9
Summerlee	Wilsons and Co.	7	1	8
Langloan	Addie and Rankin	5	1	6
Calder	William Dixon	5	3	8
Govan	ditto	4	2	6
Carnbroe	Merry and Cunningham	4	2	6
Omoa	Robert Stewart	3	1	4
Shotts	Shotts Iron Company	3	1	4
Castlehill	ditto	2	1	3
Garscube	—	—	2	2
Glengarnock	Merry and Cunningham	8	1	9
Ardeer	ditto	4	—	4
Eglinton	William Baird and Co.	5	—	5
Blair	ditto	4	1	5
Lugar	ditto	—	4	4
Muirkirk	ditto	1	2	3
Portland	Freeland and Lancaster	4	—	4
New Cumnock	—	—	3	3
Dalmellington	Dalmellington Iron Company	4	—	4
Forth	Forth Iron Company	4	2	6
Kinniel	William Wilson and Co.	3	1	4
Almond	James Russell and Son	2	—	2
Carron	Carron Iron Company	3	1	4
Devon	J. Miller	1	2	3
Lochgelly	Lochgelly Iron Company	1	3	4
Lumfinnan	A. Christie and Co.	1	—	1
Gladsmuir	C. and A. Christie	1	—	1
Total		123	41	164

MURCHISON'S REVIEW OF BRITISH MINING FOR THE QUARTER AND YEAR ENDING DEC. 31, 1857.—It will be seen by our advertising columns that this valuable periodical will be published on the 16th inst., and we have reason to believe that on this occasion it will be unusually interesting and important; giving much extended information respecting different mines. We have no doubt the author will enter into the subject in that able and practical manner for which Mr. Murchison's Reviews are so eminently known. In our next Journal we shall give the usual introductory chapter; and in the same, or future Journals, we may quote from other parts of its valuable contents.

The following report was received too late to be inserted in its proper place:—

PROVIDENCE MINES.—H. A. Anthony, Jan. 6: The lode in the 125 fm. level, west of Higgs's shaft, is 18 in. wide, poor. The lode in the 85, west of said shaft, is 15 in. wide, poor. The lode in the 75, east of said shaft, is 2½ ft. wide, worth 35l. per fm. The stope in the back of the 75 east is 4 ft. wide, worth 120l. per fm.; the stope under the same is 4 ft. wide, worth 80l. per fm. The cross lode stoping in the back of the 75, east of shaft, is 6 ft. wide, worth 80l. per fm. The lode stoping in the bottom of the 65, east of shaft, is 3 feet wide, worth 30l. per fm. The stopes in the bottom of the 65, east of Comfort lode, on a limb of the carbona, is 18 in. wide, worth 8l. per fm. The stope in the bottom of the old carbona is 2 ft. wide, worth 8l. per fm. The lode in Dunstan's shaft is 2 ft. wide, worth 6l. per fm. The lode in the 12, east of Dunstan's shaft, is 15 in. wide, worth 2l. per fm.

LEAD ORES.

Sold on the 31st December.

Mines.	Tons.	Price per ton.	Purchasers.
Great Wheal Baddern	11	£18 7 6	Locke, Blackett, & Co.
ditto	13	14 15 0	ditto

Sold on the 2d January.

Mines.	Tons.	Price per ton.	Purchasers.
Wheal Ludcott	27	19 11 6	R. Michell and Son.

Sold on the 4th January.

Mines.	Tons.	Price per ton.	Purchasers.
Vale of Towy	20	13 1 6	Sims, Willyams, & Co.
ditto	16	12 10 0	ditto
ditto	4	12 4 0	ditto
ditto	12	8 4 0	ditto

BLACK TIN.

Sold on the 2d January.

Mines.	Tons c. q. lb.	Price per ton.	Amount.	Purchasers.
St. Austell Consols	11 14 3 0	£57 10 0	£ 673 18 1	Enthoven.
ditto	0 5 1 9	46 0 0	12 5 2	ditto

COPPER ORES.

Sold at LIVERPOOL, for the COPIAPO MINING COMPANY, on the 4th January.

	Tons.	Price per ton.	Purchasers.
Lot 1	60	£20 18 0	Pocket Nook Company.
Lot 2	60	14 7 6	Newton, Keates, & Co.
Lot 3	62	15 11 6	ditto
Lot 4	55	14 2 6	ditto

Biddings were also made by Messrs. Williams, Foster, and Co.; Vivian and Sons; P. Grenfell and Sons; C. Lambert; J. Bibby, Sons, and Co.; J. Keys and Son.

COPPER ORES.

Sampled December 18, 1857, and sold at Swansea January 5, 1858.

Mines.	Tons.	Produce.	Price.	Mines.	Tons.	Produce.	Price.
Chili	87	18⅜	£16 15 0	Chili	56	17⅛	£15 11 0
ditto	86	17⅞	16 3 6	ditto	52	17⅛	15 13 0
ditto	84	18⅛	16 4 0	Berehaven	110	10⅜	9 18 0
ditto	71	17⅛	15 16 6	ditto	109	10	9 5 0
ditto	64	19⅜	17 16 6	ditto	74*	11	10 8 0
ditto	63	19⅛	17 0 0	Del Soto	67	21⅛	19 5 0
ditto	62	19⅛	17 7 0	ditto	66	21⅜	19 7 0
ditto	61	19¼	17 13 6	Holyford	43	19¼	18 9 6
ditto	60	17⅛	15 13 6	ditto	18	8	7 4 0
ditto	59	17⅜	16 2 6	Canadian	12	40⅛	37 15 0
ditto	58	18⅛	16 6 0	ditto	4	34⅛	29 4 0
ditto	57	17¾	15 17 6	Kanmantoo	10	19⅛	18 2 0

TOTAL PRODUCE.

Chili	920	£15125 2 0	Holyford	61	£ 924 0 6
Berehaven	293	2866 17 0	Canadian	16	569 16 0
Del Soto	133	2566 17 0	Kanmantoo	10	181 0 0

COMPANIES BY WHOM THE ORES WERE PURCHASED.

Copper Miners' Company	119	£1891 17 6
Freeman and Co.	282	3336 16 6
P. Grenfell and Sons	234	3238 3 6
Sims, Willyams, Nevill, and Co.	198	3600 4 6
Vivian and Sons	196	3185 3 0
Williams, Foster, and Co.	308	5218 18 6
Mines Royal Company	67	1289 15 0
C. Lambert	29	472 14 0
Total	1433	£22,233 12 6

Copper ores for sale at Swansea, Jan. 19.—Springbok 54, 53, 50, 49, 45, 5, 51, 48, 47—Wheal Maria 50, 47, 34, 31, 20—Cobre 87, 82, 69, 67, 50, 49, 47, 13, 11, 12—Berehaven 97—Sydney 22—Namaqua 19.—Total, 1209 tons.

AVERAGES.

	Produce.	Price.	Standard.
British	11 7-16	£10 14 0	£113 8 6
Foreign	18⅞	17 2 0	102 9 0
Sale	17 1-16	£15 10 0	£104 5 0

Totals—British, 354; Foreign, 1079=1433 tons (21-cwts.)

AVERAGES OF LAST SALE.

	Produce.	Price.	Standard.
British	8 13-16	£ 7 12 6	£111 15 6
Foreign	13⅛	11 14 0	106 8 0
Sale	12 15-16	£11 11 0	£106 10 6

Totals—British, 53; Foreign, 1260=1313 tons (21-cwts.)

* Purchased for Pocket Nook Company.

COPPER ORES.

Sampled December 23, and sold at Tabb's Hotel, Redruth, January 7.

Mines.	Tons.	Price.	Mines.	Tons.	Price.
Wheal Buller	113	£1 14 0	West Alfred Consols	50	£1 19 0
ditto	89	3 13 6	ditto	15	8 6 6
ditto	77	4 0 0	Great South Tolgus	65	4 6 0
ditto	73	2 19 6	ditto	64	3 16 6
ditto	65	2 12 0	ditto	57	12 13 0
ditto	64	3 18 0	Great Wheal Alfred	69	3 11 6
ditto	55	7 18 6	ditto	45	3 7 6
ditto	40	9 4 0	ditto	29	4 18 0
ditto	30	1 14 0	ditto	18	1 13 0
West Basset	76	5 15 0	ditto	16	10 8 0
ditto	72	4 6 6	Tolvadden	78	6 17 6
ditto	71	7 1 6	ditto	61	3 7 6
ditto	69	5 9 0	ditto	9	16 14 0
ditto	59	4 9 6	Wheal Margery	64	4 14 6
ditto	58	8 12 6	ditto	51	2 8 0
ditto	44	4 16 6	Levant	46	3 16 0
ditto	26	3 1 0	ditto	37	8 17 0
Alfred Consols	71	6 9 6	Rosewarne	46	7 3 6
ditto	47	6 19 0	ditto	25	4 8 6
ditto	32	11 9 6	ditto	10	8 3 0
ditto	31	1 7 6	South Crenver	52	1 18 0
ditto	26	2 5 6	ditto	24	6 4 6
Nanspusker	50	8 14 0	Carrack-Dews	62	5 15 0
ditto	34	6 14 0	Boiling Well	41	2 17 6
ditto	29	1 9 6	ditto	20	10 4 6
Par Consols	74	11 5 6	Wheal Anna	37	5 7 0
ditto	61	8 13 6	ditto	22	2 12 0
ditto	60	9 18 0	Clijah and Wentworth.	40	4 1 0
ditto	58	8 0 6	ditto	11	8 9 0
ditto	47	4 3 0	Wheal Unity Consols	50	9 2 6
North Basset	75	4 12 0	Wheal Agar	39	6 3 0
ditto	52	4 10 0	ditto	7	1 15 0
ditto	50	5 9 0	West Fowey Consols	45	8 15 0
ditto	31	3 14 6	Halamanning	25	10 19 0
ditto	28	5 11 0	ditto	10	5 4 0
ditto	25	3 2 6	ditto	4	3 4 0
ditto	20	5 14 6	Lewis Mine	7	4 0 6
ditto	17	17 9 6	ditto	3	10 7 6
West Alfred Consols	70	1 16 0	ditto	2	7 0 0
ditto	55	1 18 6	Wheal Emily	12	5 4 6

TOTAL PRODUCE.

Wheal Buller	606	£2311 8 6	Rosewarne	81	£ 522 3 6
West Basset	475	2682 13 0	South Crenver	76	248 4 0
Alfred Consols / Nanspusker	320	1960 18 6	Carrack-Dews	62	356 10 0
Par Consols	300	2618 0 6	Boiling Well	61	322 7 6
North Basset	298	1612 1 6	Wheal Anna	59	255 3 0
West Alfred Cons.	190	454 5 0	Clijah and Wentw.	51	254 19 0
Great South Tolgus	186	1245 7 0	Wheal Unity Cons.	50	456 5 0
Great Wheal Alfred	177	736 15 0	Wheal Agar	46	252 9 0
Tolvadden	148	892 8 6	West Fowey Cons.	45	393 15 0
Wheal Margery	115	424 16 0	Halamanning	39	338 11 0
Levant	83	502 5 0	Lewis Mine	12	73 6 6
			Wheal Emily	12	62 14 0

Average Standard £126 8 0 | Average Produce 6⅝
Average Price per ton £5 8 6
Quantity of Ore 3492 tons | Quantity of Fine Copper, 226 tons 1 cwts
Amount of Money £18,977 5 6

LAST SALE.—Average Standard £123 3 0.—Average Produce 7⅛
Standard of corresponding sale last month, 123l. 14s.—Produce 6⅞.

COMPANIES BY WHOM THE ORES WERE PURCHASED.

Mines Royal Company	105	£ 594 1 6
Vivian and Sons	861	8607 19 0
Freeman and Co.	89½	619 0 6
Grenfell and Sons	385¼	2280 4 5
Sims, Willyams, Nevill, and Co.	232⅛	1418 18 3
Williams, Foster, and Co.	816½	4883 2 3
Mason and Elkington	381¾	2006 11 1
F. Bankart	41	117 17 6
Copper Miners' Company	193½	1519 6 6
C. Lambert	386	930 4 6
Total	3492	£18,977 5 6

NO SALE on Thursday next, 14th January.

Copper ores for sale on Thursday week, at the Royal Hotel, Truro.—Mines and Parcels.—Devon Great Consols 1536—Phœnix Mines 366—West Caradon 330—Hingston Down 240—Bedford United 207—Wheal Friendship 160—Collacombe 135—Duke of Cornwall 115—Kelly Bray 110—Wheal Edward 105—Calstock Consols 90—South Bedford 80—Wheal Franco 68—Wheal Emma 61—Devon Buller 57—Lady Bertha 55—Gawton Copper Mine 55—West Crinnis 55—East Russell 52—Wheal Russell 46—Tavy Consols 40—Devon and Courtenay 28—West Par Consols 14—Wheal Zion 7—Trevone 6.—Total, 4018 tons.

SECOND SALE IN JANUARY.

Years.	Tons.	Prod.	Amount.	Standard.	Ore copper.	Cake cop.
1849	1813	8⅜	£ 8,376 13 0	£ 87 7 0	£54 15 0	£79 10
1850	2247	8⅛	13,196 6 6	106 7 0	72 8 0	84 0
1851	2362	8¾	13,958 15 6	104 18 0	72 0 0	84 0
1852	2894	7⅜	15,985 7 0	104 15 0	69 19 0	88 10
1853	3262	6¾	24,575 6 0	152 5 0	111 9 0	107 10
1854	4180	6⅛	29,009 6 6	149 0 0	106 15 0	126 0
1855	4288	6½	26,781 10 6	139 6 0	96 3 0	126 0
1856	4676	6¾	31,379 6 0	141 3 0	100 3 0	126 0
1857	4327	6⅜	32,945 9 0	155 15 0	114 8 0	126 0

The copper in the ore expresses the nett price per ton of copper paid to the miner.

Notices to Correspondents.

*** Much inconvenience having arisen, in consequence of several of the Numbers during the past year being out of print, we recommend that the Journal should be regularly *filed* on receipt: it then forms an accumulating useful work of reference.

VENTILATION OF MINES.—A letter appeared in your last Journal from one who terms himself "A North Country Viewer," and who also appears desirous of coming before the public as the possessor of no ordinary talent. In his letter he ventured to give his private opinion respecting certain individuals, which was quite unealled-for, and altogether foreign to the subject. Such letters cannot possibly interest or benefit the public in the least degree, as they emanate from bad feelings. I say, let the "North Country Viewer" openly show himself in the field, if he wishes discussion on the subject of ventilation; I am sure Mr. Wales will not shrink from meeting him fairly and openly, to remove any imperfect notion of which he is possessed. I trust that next week we shall be favoured with the name of the "North Country Viewer," or else an apology for what he has already said: in this I think Mr. Harold Horth will quite agree with me.—A COLLIERY VIEWER: *Staffordshire.*

JOINT-STOCK COMPANIES ACT, 1856-7—John Lott (Landilo).—"Three-fourths of the number and value of," &c., in sec. 34 of the principal Act means "three-fourths of the *subscribed* value of," &c.; and there can, we think, be no doubt that each share upon which only 4*l.* 10s. has been paid has precisely the same privileges as a share fully paid up. This is but justice, since each holder of a 4*l.* 10s. share is liable (sec. 61) for the 5*l.* 10s. remaining unpaid. If table B has been adopted without mutilation, the holder of 100 of the 10*l.* shares will have (rule 38) 28 votes, and the holder of 100 of the 4*l.* 10s. shares would have the same number of votes. Our correspondent is, of course, aware that a copy of the special resolution must (sec. 35) be forwarded to the Registrar in London, and advertised (sec. 103) in the *London Gazette*, the company being in England. The adventurer alluded to in our correspondent's first question can vote quite as well as any one who has paid for his shares in cash.

PEDN-AN-DREA MINE.—The attention of those concerned having been already called to the matter, the publication of further letters is not requisite. Mr. Waddington, as a committeeman, should know who supplied candles to the mine, and what they are charged at: he should also endeavour to rectify any defects in the management.

WHEAL ZION.—From the report of the meeting, I perceive that our offices are again shifted, and that we have another secretary. The quarrel of the last with a section of the committee I shall not make any comment upon. The call now made is the twenty-third; I should wish to enquire whether there are to be any more? I have not heard whether Mr. Price has brought forward the motion he gave notice of some six months since to wind-up the concern. The shares I am told are at a heavy discount in the London market, while down here their ancient glory and fair renown have entirely departed from them.—P. P.: *Bath.*

"A Shareholder in Several Mines."—In general, at a meeting, one of the committee takes the chair. In a cost-book mine, we have never heard that there is any particular qualification for a committee man; if a person has sold his shares he may still remain upon the committee until the next election, when he is disqualified, as not being a partner in the undertaking. Generally, the votes of the majority are binding on those of the minority, and such a case as our correspondent puts could never occur in any mine constituted under the Cost-book System. In foreign mines it is invariably required that a director should have a qualification, and it is the province of the shareholders to see that such is *bona fide*. Were proprietors to attend more sedulously to their own interests, there would be less complaints of the errors of omission and commission of directors and managers.

OOLA MINING COMPANY.—Mr. Jeffree, the secretary, was to have visited this mine in company with Capt. Champion. I trust we shall receive a report from that gentleman, stating what our prospects are; at the same time, it is to be hoped that ores will be raised, and the engine, which was put up six months before it was wanted (for what purpose none but the committee man who superintended the erection can tell), will shortly be set to work. Much valuable time has been lost; let us now, by increased energy, make up for that. We have been told that there are ores at surface; many will be better pleased when they see them at market.—ERIN.

CARSONS CREEK CONSOLIDATED MINING COMPANY.—The directors returned a first instalment of 5s. per share in the year 1855, with the promise of a further payment hereafter, which promise has not yet been carried out, nor can I ascertain that the company has any office where shareholders could apply for information. Perhaps some of your readers can throw some light on the subject?—D.

PRECIOUS METAL-MAKING.—"F. S." has given a very ingenious solution of the method by which old Gabriel Platte obtained gold, and I have no doubt he has arrived at a tolerable approximation to the truth. He would, however, be conferring a great favour on all those who are interested in the pursuit if he would tell us the principle on which Harris's magnets rotate, how Godefroy's silver is obtained, or Squire's globules got. When we are acquainted with these, I may have some further questions to ask him; I only trust he or they will be able to give as plain a solution as that by which old Platte's method is made manifest. At Sir Charles Kirkpatrick's examination in bankruptcy, a few days since, it was stated that the moment Mr. Hiram Berdan left his machine at the Windsor Ironworks there was no more gold to be obtained, although as long as he directed the movements of the engine there was not a sample of dirt which did not return its auriferous product. Truly, the gold mining mania was productive of knaves and dupes.—ALASCO.

THE RIGHT AND THE WRONG MANAGEMENT OF SLATE QUARRIES.—Under this head we have received a long communication from Mr. Rich. Thomas, of Ormonde Quarry. After alluding to the mode in which many of these undertakings are taken up by speculative individuals, merely for the purpose of disposing of the shares, this gentleman gives a case in point of a quarry which was worked in Wales by a proprietor, now deceased. He first commenced by engaging the best men at a rate of 5s. per diem, instead of employing those whom he could obtain at a less cost, but who would not be found on trial so efficient as the higher-priced labourers. An advertisement was then inserted for a manager, it being specified that none need apply who were not competent, brought up quarrymen, and able to instruct the men in every branch of quarrying. In answer to this, he received five applications, severally from Mr. Lovatt, of Liverpool, watchmaker; Mr. James, of Dublin, shoemaker; Mr. Jackson, of London, engineer; Mr. Twigg, of Cornwall, miner; and Mr. Richard Hughes, of the Carnarvon Slate Quarry, agent, all of whom were provided with first-rate testimonials. On requiring Mr. Lovatt to split and dress a slate, he replied "he was not accustomed to that sort of work, but he had seen lots of slate at Liverpool, and felt convinced that, if appointed manager, he could work the quarry to advantage, and entire satisfaction of the owner." Messrs. James, Jackson, and Twigg were put through a like test, and were signally found wanting. The only one of the applicants who was at all competent was Mr. Richard Hughes, and he obtained the situation. During the five years that he managed the quarry it returned a total profit for that period of 31,700*l.* On the decease of the owner the property devolved on his son, who, not satisfied with the profits he was making, disposed of it to a company. As soon as they took possession they superseded Mr. Hughes, and appointed as manager a civil engineer, a friend of one of the directors, who had never seen a slate quarry. The first step of the new manager was to dismiss the best quarrymen, bring in a set of miners and navvies, sink shafts, drive levels, and erect engines. Instead of paying the workmen by the thousand, they received so much for blasting and removing the rock, making any number of slates they thought proper; this, consequently, lead to a great waste and destruction of property—the slates being of inferior quality, and the workmen able to deceive their employers, who were ignorant of their duties, as they thodght fit. In six years the total loss was 21,524*l.* An investigation took place, when the report handed to the directors was—"That the quarry was of the best sort, but that the losses had been solely incurred by bad management and incompetence." The officials were all dismissed, and since the quarry has again been put in working order it has returned a profit. Mr. Thomas states this is but one instance out of many, and cautions proprietors of slate quarries to be careful whom they entrust with the management of their property. It is his intention shortly to forward a communication how and where the best slate quarries are to be found, which no doubt will be read with interest.

URANIUM.—In Mr. Watson's Annual Review, published in last week's Journal, I find amongst the statistics published by Mr. Robert Hunt a very curious item—"Uranium from St. Austell Consols, 1 ton, 9*l.* 16s." This ore must surely have contained a very low produce of uranium to have realised such a miserable price! At all events, I always considered that the oxides of uranium were of considerable value. Perhaps some of your correspondents who are better informed, perchance the buyer of this precious ton, will inform your readers what would be the value of an ore containing 25 per cent. of peroxide of uranium, the other ingredients in the ore being copper, lead, and 4 per cent. silica? and he or they will greatly oblige your old correspondent—A SMELTER: *Bristol.*

METALLIC MANGANESE.—In answer to "F. H.," I may state that I have a process by which metallic manganese may be very cheaply produced. "F. H." can obtain my address from you, if he has ascertained that metallic manganese is useful, and desires to know more about it. I send a sample, which is all I have left from a large lump recently made, herewith, for the inspection of such of your readers as may take an interest in the subject.—S. C.

SLICKENSIDES.—From what has come under my observation, I am of opinion that not two in ten practical miners would altogether agree with Mr. Hopkins and Captain Ennor's remarks respecting the cause of these phenomena. Most practical miners have met with these shining faces in nearly every kind of ground, and I have seen them myself in hard granite, in ironstone, and in other rocks, where there has not been any symptoms of there having been friction. I have also seen them in ground so soft that it would not bear any scrubbing, and if you were to scrub for ever you could not get a lustre on it. I have seen them in soft lodes and hard lodes, rich lodes and poor lodes, so that Capt. Ennor might well say that it is not likely to be of much benefit to the practical man. It would be of greater utility than writing upon such phenomena, if either of the gentlemen above referred to would state the best way to put in timber, break ground, and give friendly advice to agents as to the best machinery for pumping, drawing, dressing, and laying out floors. Both Mr. Ennor, who has been through nearly all the mines in the county, and Mr. Hopkins could give this information, and if they consider the benefit they will confer they cannot object to do so.—J. SEYMOUR: *Lostwithiel.*

GENERAL SMOKE-CONSUMING COMPANY (Limited)—"C. J." (Manchester).—We cannot obtain the information our correspondent requires, as the company appears to be *non est*, the offices being empty and forsaken. The patent which the company proposed to work was Besnier's, but we think it was never completed.

CORNISH MINE PHOTOGRAPHS.—"The Bal Maiden" will appear in our next Journal.

IRISH PEAT COMPANY.—"H. J." is in error with reference to this company being dissolved. The offices are still at the Old Jewry Chambers, and Mr. A. D. Michael is secretary, in place of Mr. Jebson, who resigned through ill health. The works are progressing satisfactorily, although slowly, and paraffine candles are being made and sold at, we believe, 2s. 3d. per lb. We shall be enabled to give some further particulars in our next. We believe Mr. Reece is still connected with the company, but cannot say in what capacity.

INTERNATIONAL STEAM COASTING COMPANY.—You have several times referred to this company as likely to confer great benefits, both upon London and Paris, by establishing a cheap and direct means of communication between the two cities, and as you stated that M. Soubeberille was connected with it, I naturally thought that no time would be lost in carrying out the project. The last time I enquired of you for information, you could only state that the offices were in Mark-lane, and presumed that the state of the money market alone prevented the company's progress; but I have called at the address indicated, and find the offices empty, and to let, and must therefore again trouble you. If there be no London office, perhaps you will ascertain what is doing in Paris.—F. H.: *City.*

WHEAL AGAR.—I find in the Journal of last Saturday, under the head of "Mining Notabilia," the following remarks:—"Wheal Agar is a little old mine, now discontinued, whose working might be again resumed," I beg to inform you that it has been at work since Sept. 1855, and that vigorously, at a cost of between 400*l.* and 500*l.* per month, and, I am happy to add, with every prospect of success.—W. A. BUCKLEY, Sec.: 50, *Threadneedle-street*.

TIN-PLATE TRADE.—We are obliged to "J. G." (Wolverhampton). Information on the subject will be very acceptable.

NEW LINARES MINING AND SMELTING COMPANY.—This company was formed in 1853, and some 20,000*l.* or 30,000*l.* subscribed for the purpose of working the mines. Ultimately, the company was wound-up, and when the last subscription was paid the directors informed the shareholders that there would be some money returned; this was in 1854, but up to this date no further notice has been taken. Pray urge the directors to let us unfortunates hear from them.—A SUBSCRIBER.

GREAT WHEAL VOR UNITED MINES.—I have seen some allusions made by correspondents in your valuable Journal for obtaining the London offices. It would appear evident that the parties are not interested, as by the report of the proceedings of the last meeting it appeared that not a single share is, or ever has been, held in Cornwall. This was a statement that was not contradicted, and, therefore, why London shareholders, supporting an establishment of such great benefit to Helston, should have offices on the mine, and be compelled to go to Cornwall to attend the meetings, I cannot understand. The report of the committee now engaged in inspecting the mine is looked forward to with considerable interest, and, from the parties composing it, will it is hoped settle the question whether further retrenchments can be safely made, either at the mines or in London, and, notwithstanding the great difficulties such an immense concern has had to contend with through the fall in tin, give confidence for perseverance to success, which the adventurers are well worthy of.—AN ORIGINAL HOLDER: *Brompton.*

ALTEN AND QUENNANGEN MINING ASSOCIATION.—"A Country Shareholder" is perfectly correct when he states that the meeting should be held in the month of Dec. In the spring of last year; however, a new manager was appointed, and the delay in calling the meeting most probably has arisen from the fact that the annual accounts have not yet reached London. Delays of this kind have previously occurred. It must be remembered that during the winter months communication is difficult, and that often the post, owing to tempestuous weather and snow drifts, is detained in the mountains for some considerable period.

WHEAL AGAR.—Knowing that the columns of your valuable Journal are ever open to the correction of error, I venture to solicit a space in your next for a few brief remarks on this (so described in your last) "little old mine—now discontinued." Your correspondent evidently "dreamed a dream," and, when he awakes to consciousness, will doubtless inform your readers that this "little old mine" is one of the most extensive in Cornwall, being no less than 800 fms. from east to west, and upwards of 300 from north to south; and when this dreamer, like Joseph, should "dream a dream more," he will, no doubt, tell us (as the fact is) that this "discontinued mine" has been for years past, and is now being, vigorously worked, with an engine and ample machinery, under the able management of Messrs. Thomas, of 50, Threadneedle-street (the largest and probably the most fortunate holders of mining property in England), and that, too, with every prospect of speedy success.—A SHAREHOLDER: *Jan. 1.*

In Tolvadden report, last week, there was an error: the ore course in the 10 fm. level should have been 6 "feet" wide, not "inches."

TAVY CONSOLS.—A meeting being convened for Tuesday, to enforce payment of calls, or to pass a resolution to wind-up the company, the serious attention of all concerned is enlisted. To this time all the calls have been well met, and why they should not now be so is a fair matter of enquiry. Have the shareholders lost confidence in the management? I see the reports, still signed by Capt. R. Williams, of a highly satisfactory nature, and surely the proprietors will not allow their property to be abandoned while prosperous mines, such as Lady Bertha, Virtuous Lady, and North Tavy are springing up around them. People say here that if Tavy Consols be abandoned the water-power will, without controul, be available for North Tavy. This rumour may have arisen from the known position of the several interests: the managers of Tavy Consols being the principal shareholders in North Tavy. However this may be, let proprietors look before they allow a good property to be sacrificed.—ARGUS: *Plymouth.*

PROGRESS OF MINING IN 1857.—*Errata:* For the "father of cross-cuts, and of many miners," read "of many mines."—Marke Valley: "500*l.* worth of ore during the year," read "500*l.* worth of ore per month during the year." After the Review was published, Mr. Watson received particulars of Copper Hill, St. Day United, Tincroft, Trevoole, Rosewarne and Herland, &c,

THE MINING JOURNAL
Railway and Commercial Gazette.

LONDON, JANUARY 9, 1858.

We remarked last week, that notwithstanding the returns from the Board of Trade show a general decrease in the exports of the country to a very serious amount, the shipments of minerals and metallic manufactures had not fallen off in the proportion which they represented in the increase which had been going on for nearly two years—in fact, that the decrease in these articles was equal to only between 9 and 10 per cent., whereas, in the increase, metals and metallic manufactures furnished from 25 to 35 per cent. of the aggregate. We now return to the subject, and take the item of coal alone, in which there has been no decrease whatever, but, on the contrary, an excess, in Nov., 1857, over the same month of the previous year of 56,927*l.*, while, for the 11 months of 1857, as compared with 1856, the increase is 362,287*l.*, so that the augmentation in Nov., as respects the month itself, was much above the average furnished by the total for the 11 months. The declared value for the month in 1857 was 253,514*l.*, against 196,507*l.* in 1856, and 181,802*l.* in 1855. For the 11 months of 1857 the aggregate value is set forth at 3,014,430*l.*, while, for 1856 it is 2,652,143*l.*, and 2,307,355*l.* for 1855. This demonstrates a most satisfactory state of things as respects our coal producers, and those occupied in its export trade, while there is reason to believe that a still further improvement will be shown in the returns for Dec., which will be published at the close of the current month. There is, in fact, every justifiable expectation that great activity will prevail in our coal-yielding districts throughout the year on which we have just entered—more especially as there is such a marked improvement in all monetary matters, with every disposition, apparently, on the part of the public to support legitimate and national enterprise, and none can be more so than that England should be the chief source of supply of this indispensable article of commerce.

Our allies, the French, were the chief recipients of the exports of coal, both in the month and the eleven months. During the shorter period they took to the value of 46,293*l.*, against 39,056*l.* in Nov. 1856, and 32,436*l.* in 1855. In the longer period there was exported to them coals to the amount of 549,077; whereas, during the same period of 1856, the total was 477,157*l.* and 388,612*l.* in 1855. The next best customer during the month was Spain, with the Canaries, to which country was transmitted to the value of 19,865*l.*, against 16,325*l.* in 1856, and 9223*l.* in 1855; but the total for the eleven months is set down at 164,911*l.*; against 149,262*l.* in 1856, and 112,268*l.* in 1855; consequently less than the Hanse Towns, Denmark, and Prussia, which took, in 1857, to the extent of 213,239*l.* for the first-named place, 197,552*l.* for the second, and 176,782*l.* for the third; which, in respect of the Hanse Towns and Prussia, was a considerable increase over the eleven months of both 1856 and 1855, but a trifling decrease of 3031*l.*, in reference to Denmark, as compared with 1856. To the United States coal was shipped in Nov. to the amount of 14,395*l.*, which is an excess over Nov. 1856, of 3769*l.*, but a decrease as compared with Nov. 1855, of 520*l.* The total for the eleven months of the past year was 105,865*l.*, while in 1856 it was 139,523*l.*, consequently showing a falling off in this period; but in 1855 the aggregate value was only 98,702*l.*, so that the longer period shows how the trade with America has expanded, and the result of the month of Nov., which might have been expected to give a heavy decrease, is evidence of the favourable position of the coal trade with the United States. Altogether, therefore, it is a cause of much satisfation to ourselves to be in a position to furnish such encouraging statistics to our class readers who are especially interested in the question; for it is invariably found that activity in one branch of our mineral production indicates, more or less, the general condition and prospects of the others. Added to which is the fact, that in machinery, copper, and brass, there was an advance in the shipments during November, and we may, therefore, look forward to good and extensive business in every description of mineral produce and manufacture.

It is important to mention that the increase in the coal trade is not confined to the exports. The returns furnished from various sources show that the importations into the London district of sea-borne coals was 3,133,459 tons for the year just past; whereas during the twelve months of 1856 the aggregate quantity was 3,119,884 tons, consequently giving an increase of 13,575 tons. In coal brought up by railway and canal there was, however, a falling off to the extent of 38,624 tons; the total quantity for 1857 being 1,233,071 tons, and 1,271,965 tons for 1856 The delivery of coal during the same periods was 3,120,972 tons for the year ending Dec. 31, 1857, and 3,100,322 tons for 1856, being an increase of 20,650 tons. The quantity delivered in the month of December was 323,830 tons. The unusual mild weather which has prevailed produced a marked effect in the consumption of house coal as compared with ordinary winters, yet prices were maintained during the last month fully equal to those of Dec. 1856, the quotations being from 18s. to 19s. 6d. for best Wear; but the freights which were from 7s. 6d. to 9s. per ton during Dec. 1855, were only from 6s. to 7s. during the past month, and the coal owners have benefited to the extent of the difference. The sudden change in the temperature has effected a material alteration, and house coal has risen 2s. to 3s. per ton, although forty fresh ships came into the river.

Of the total quantity of coal imported during the past year, it appears that of house coal 174,171 tons were sent from the Tyne, 894,067 tons from Sunderland and Seaham, and 502,022 tons from Hartlepool and Tees, giving a total of house coal of 1,570,260 tons. Of the remaining quantity, 232,426 tons were steam coal; 684,300 tons gas; 254,800 tons coking; 173,190 tons manufacturing; 162,864 tons Welsh; 42,227 tons Yorkshire; and 14,192 tons of small coal, making collectively the tonnage of 3,133,459 for sea-borne coal. Of the supply by rail and canal, we find that there were 105,720 tons of house coal from Durham, and 2489 tons of gas coal from the same place. Of coke there were 21,737 tons; 67,124 tons of Welsh, and 1,038,179 tons of Midland, making the total of rail and canal of 1,235,249 tons, and a grand total of 4,368,708 tons of sea-borne and rail and canal.

The number of vessels occupied with this trade was 8881 for the twelve months, of which 7804 were entered by 13 factors, and 1077 by agents.

For the service of the month of December 1080 vessels were engaged; 452 left Newcastle with 155,914 tons of coal; 102 from Seaham, with 25,491 tons; 188 from Sunderland, with 70,695 tons; 196 from Hartlepool, with 57,141 tons; 32 from Middlesbro' and Stockton, with 8092 tons; 19 from Blyth, with 4541 tons; and 91 Scotch and Welsh vessels, with 18,894 tons.

The Great Northern Railway brought up 45,806 tons during December; the North-Western, 41,861 tons; the Eastern Counties, 8210 tons; the Great Western, 2399 tons; the South-Western, 1084 tons; the South-Eastern, 573 tons; the London and Brighton, 76 tons; and the Tilbury Fortline, 12 tons: the total by railways being, consequently, 100,021 tons. By canals there was imported into London only 2662 tons during the same month.

We have thus furnished statistical information of the enormous business transacted in this important article of coal for every description of purpose; and when it is thus seen how rapidly both the home and foreign demand increases, it seems impossible to determine the extent to which the trade will be carried, and the importance which attaches to this branch of England's mining industry.

A recurrence of those disagreements between the masters and men which appear to take place periodically in South Wales, has recently again occupied considerable attention in that part of the country. A few years ago a strike of a most resolute description occurred throughout Glamorganshire and Monmouthshire; the men adhered for six months to their determination to refuse work, and the employers declined to make any concession whatever in their proposals. In this state affairs continued till the former colliers gradually left to seek occupation in other parts, and fresh hands were brought to supply their places. These men have now, in their turn, taken a similar course, and the result has been considerable loss and inconvenience on both sides.

It is a matter for grave consideration, whether no means can be adopted to prevent so frequent a repetition of these events. Disastrous as all strikes must necessarily be, they are especially so in mining districts, where, in addition to the loss occasioned by the suspension of the works, injury so serious is caused to the pits that oftentimes months of labour cannot atone for. At the commencement of the present strike at Aberdare, the engineers in several places were prevented pumping the water from the mines, and the damage thus sustained can be estimated by those alone engaged in the profession. It must be owned that Welsh colliers manifest an unhappy tendency towards strikes. A reduction in wages is the signal for them to turn out, and their obstinacy is peculiarly inflexible. Nothing but want will induce them to return to work when once they have left it. They are easily imposed upon by the specious arguments of those whose interest it is to keep up the strikes, and they repose implicit confidence in any statements which operate to the disadvantage of their employers. They are readily induced to regard themselves the victims to oppression, and hence the formidable combinations which are entered into with such remarkable alacrity. On the present occasion there is a probability of the difference being adjusted in less time than ordinary, and the contagion has not spread so universally as in former years; but the same spirit is perceptible, and the same obstinacy has been manifested. A great deal of this, doubtless, arises from the delusive hope that the masters will be the first to yield; and this very fact increases the difficulty of effecting a reconciliation on any other terms than those which the colliers themselves demand. Hence it becomes merely a question of who can hold out longest; and although repeated experience ought to have taught them that the masters are generally in a position to do so, no greater wisdom or prudence is displayed than formerly.

This, however, is only one phase of the difficulty. It cannot be doubted that the masters are sometimes to blame for the course they pursue. We know that recently some of the most intelligent of the colliers at Aberdare protested that, had they been met fairly at the first, had they been told why the reduction was made, and admitted more into the confidence of their masters, the strike would never have occurred. This may or may not be true, but we believe that if the measures adopted to cure were used to prevent the outbreaks, we should hear less of them. We do not mean to affirm that the reduction in wages insisted on at this time is either unreasonable or unnecessary. We consider it is not. But have the masters taken any pains to convince the men that it is not so? Have they not rather assumed that the men were bound to yield to whatever proposals they thought proper to make? A little more regard for their prejudices, and a little more consideration for their circumstances, would not be thrown away. We may rest assured that there is seldom that good understanding between the two parties which it is important should exist, and thus, when times of depression in trade come, both are unprepared for the consequences. We shall not now enter upon an enquiry into that sytem of bill accommodation, which adds so greatly to the dilemma of many of the masters, and concerning which curious revelations were made publicly at Aberdare a short time since; but we would seriously urge them so to regulate their relations with those under them in times of prosperity that, when periods

like that through which we are passing occur, a better feeling may be found, and greater consideration shown. That it is not impossible to achieve this result no one can doubt; and even where strikes may not be wholly averted, they may at least be rendered less general and determined than those to which we have been accustomed of late years.

We call attention to a valuable paper contributed by our correspondent, Mr. G. HENWOOD, deeming the particulars at this time peculiarly acceptable and important, proving, as it incontestibly does, the necessity of persevering in mining where a mineral vein has been once proved to be productive. We know there are many mines on the eve of being discontinued, notwithstanding the opinions of the most experienced and practical agents, who declare them to be worthy of further trial. The communication proves that this once celebrated mine has on more than one occasion been in difficulties, but by perseverance has triumphed. We know that many such instances may be adduced in corroboration, but this mine is so well known—its fame being world-wide—that we quote it as a favourable example. We feel assured that the document will be read with pleasure, and hope it will be studied with profit. Facts like these, proved by statistical returns, are valuable, and far more convincing than the most laboured declamation or persuasive reasoning without them. We trust, therefore, that our readers will appreciate the paper as a valuable piece of information.

The November Australian mail has reached its destination, and the letters, *via* Marseilles, were delivered in London yesterday. The dates from Sydney are to Nov. 11, Melbourne Nov. 16, and from Adelaide to Nov. 10. We regret to find that the advices from the first-named place record another maritime calamity in the total loss of ship and cargo of the *Catharine Adamson*, and 21 persons, passengers and crew, which occurred off Sydney Heads, near Port Jackson. From Victoria, we learn that great dissatisfaction was evinced in reference to the present system of postal intercourse with the mother country. Commercial matters generally were not improved, but the returns from the gold fields presented a different picture; in fact, the yield was increasing, even at the old gold mines, and further discoveries continued to be made. The district of Mount Ararat, which is the most recent of the discoveries, as respects the deposits of the precious metal, was extending itself rapidly, and will, it is said, equal the Ballarat locality for richness in its produce. A nugget had been found at Kingower, in the Mount Ararat district, weighing 1740 ozs., which is equivalent to nearly 7000*l.* in value. For the eleven months of the year just passed upwards of 100 tons of gold had been shipped from Port Phillip, which is equivalent in value to about 11,000,000*l.* sterling, and this is only up to Nov. 15. The amount shipped since the departure of the previous mail on Oct. 16 was 846,420*l.*

The labour market was in excess of the demand, and it is stated that the proposed railways could alone be looked to to furnish occupation for a vast body of the unemployed population, and there was great doubt as to when the works would be commenced; for, although the Upper Chamber had approved of the railway bill of the Assembly, the capital had yet to be found; added to which, the report of the committee was "on the expressed understanding that a portion of one line only shall be proceeded with at present, the line to be proceeded with being from Melbourne, *via* Sunbury and Gisborne, to Sandhurst."

Our letters from Adelaide mention that an alarming fire was raging at Port Adelaide while the last advices were leaving; between 50 and 60 houses had been then destroyed, and the utmost consternation prevailed. A committee had been appointed by the Legislature to enquire into the subject of inter-colonial federation. Great difference of opinion existed on the subject. The report on the Temporary Postal Bill had been adopted. The anticipated revenue of the colony of South Australia for 1858 was a little under half a million sterling. The sum set apart for immigration was 40,000*l* for the present year.

The mining interests of the colony are represented as most flourishing The Burra Burra shows an excess of 364 tons in its yield for the last six months, as compared with the previous half-year, while the produce of the last take exceeded that of any other during the last six years. The total undivided profit was 93,201*l.* Other localities furnished copper ore of equal richness; but mining labour was wanted to develope the different districts, so that the present produce of metals in the colony was but a faint foreshadow of what may be calculated upon when labour is available for these purposes.

The opportune arrival of the chartered steam-ship, the *City of Sydney*, at Suez, with the present Australian mails, insures the dispatch to the colonies of the outward mail of last month, while the fact that this colonial vessel has been taken up in lieu of the *European*, for the postal service, will enable the mails of December and January to come home in due course. The *European*, with the September mail from England, did not reach Port Phillip until Nov. 14, which was eight days behind her time, consequently the advices on the present occasion are replies from the colony of Victoria only to the letters delivered by that steamer. The *City of Sydney* is the first vessel, for many months, which has brought a mail from Adelaide concurrently with those from the adjoining colonies.

PREPARATION OF SIMPLE METALLIC SUBSTANCES.—M. Brunner has prepared manganese by reducing the fluoride of manganese with sodium. These substances were placed in alternate layers in a refractory clay crucible, and covered with a thick layer of fluor-spar. The crucible, covered with a lid, was then gradually heated, and before it became red hot the reduction took place with a kind of hissing noise, while a yellow flame issued from the crucible. At this point the temperature was raised to a white heat, and after being maintained at that for a quarter of an hour the crucible was left to cool. On breaking it, the manganese was found as a button at the bottom. The description given of this metal by M. Brunner differs in many respects from that hitherto received. He states that its colour is like that of cast-iron; that it is brittle; does not flatten under the hammer; is very hard, turning the edge of the best tempered files; and when set at a sharp angle may be used for cutting glass. It is capable of receiving and retaining a very high polish; unalterable at the ordinary temperature, even when exposed to moist and acid vapours. Its density is from 7·138 to 7·206. It is not affected by the magnet. M. Fremy has obtained chromium by reducing chloride of chromium with sodium vapour. He describes it as a very hard metal, that is not acted upon by acids—even *aqua regia*. In reference to some of these results, and from a general consideration of the subject, M. Deville expresses the opinion that in most cases, the production of a metal in a pure state may be best effected by reducing the oxide with carbon. For this purpose he recommends that the oxide should preponderate somewhat, in chemical proportion, over the carbon; and that the fusion should be effected in a crucible made of lime or magnesia. He prefers lime on account of its alkalinity. He states that when clay or porcelain crucibles are used some silica is always reduced by the action even of such metals as platinum. The silicium produced in this way combines with the metal, and more or less modifies its character, as in the case of platinium it considerably increases the fusibility, and renders the metal brittle. This reduction of silica will be much more considerable when sodium is used as the deoxidising agent, and especially in the presence of fluorides. Thus, for instance, Wöhler obtained in this way aluminium containing 80 per cent. silicium. Hence the manganese obtained by Brunner would, in all probability contain silicium, and most likely carbon also, since sodium, as usually obtained, contains carbon. The manganese obtained by M. Deville is described as a very hard, brittle metal, similar in appearance to bismuth: when heated with water it decomposes it, and is oxidised. The chromium obtained in the same way differed from that obtained by M. Fremy, in being readily soluble in hydrochloric acid. Both M. Deville and Prof. Wöhler have observed that sodium acts energetically upon porcelain at a dull red heat; consequently, it is probable that the chromium obtained by M. Fremy contained silicium. This may account for the great difference between the characters of the metal as obtained by him, and that obtained by M. Deville, from oxide of chromium reduced with carbon in a lime crucible, and by Prof. Bunsen, in the electro-chemical way. M. Deville has found that when oxide of manganese or oxide of chromium are placed in a lime crucible, and exposed to a high temperature, these oxides are absorbed by the lime and substances produced, which are very difficult of fusion, and effect the separation of carbon or silicium from either manganese or chromium. By this treatment the fusibility of these metals is greatly diminished; in the case of chromium so much, that M. Deville regards it as less fusible than platinum. Cobalt and nickel produced in this way presents characters very different to those hitherto assigned to them. M. Deville describes cobalt as a very ductile metal, exceeding all others in tenacity. Nickel he describes as having the same characters, though in somewhat less degree.

THE IRON AND STEEL QUESTION, BETWEEN INVENTORS, CRITICS, AND WORKERS.

In the previous remarks upon this subject, it was believed that the respective merits of Mr. Mushet's and Mr. Bessemer's inventions were fairly considered, and although, from the nature of the case, it was necessary to express an opinion opposed to Mr. Mushet's views, and to state that both fact and probability were against him, this was not done in any dogmatic spirit, but more for the sake of enabling him to perceive that he is in somewhat of a false position, and also with the hope that he would avail himself of the suggestion to furnish such a demonstration of the reality of his invention as would be calculated to satisfy indifferent persons, as well as convince sceptics and silent opponents.

Mr. Mushet seems, however, to have overlooked this intention. He has replied to the remarks that were made with every desire to do him full justice, in two long letters; one of which contains so much that is irrelevant that it must be passed over; the other appears in this day's Journal. In this letter Mr. Mushet exhibits a recklessness and hardihood of assertion quite overwhelming, and equalled only by the manifest misconception and disregard of all facts bearing upon the subject of which he treats. It may be well, therefore, to point out more precisely than would otherwise have been necessary, the exact state of the question, and the course which it is believed would be most conducive to its settlement, and to merit being awarded where it is due.

All recognised authorities are agreed in regarding pig-iron as consisting essentially of iron and carbon. These substances may be chemically combined, as in white pig-iron; or, in part, mechanically mixed, as in grey pig-iron. In either case, chemists are accustomed to call the compound of iron and carbon, carburet of iron, upon the same principle that iron combined with sulphur is called sulphuret of iron. The difference between pig-iron, steel, and malleable iron is ascribed to the amount of carbon combined or mixed with the iron; hence the conversion of pig-iron into malleable iron consists mainly in the removal of nearly all the carbon, and the direct production of steel in the removal of two-thirds of the carbon: in both cases the process is one of decarbonisation. But pig-iron also contains silicium, and generally phosphorus, sulphur, and some other less important elementary substances. It is considered that these substances communicate to malleable iron and steel well-known defects; consequently the decarbonisation must be accompanied by a further purification of the iron from these substances; this purification is effected by the puddling operation, more or less advantageously, but in the conversion of pig-iron into malleable iron and steel by Mr. Bessemer's method, the decarbonisation is not accompanied by a purification of the metal, except as regards silicium. Mr. Martien's method likewise may be made to decarbonise and to separate silicium from pig-iron, but Mr. Mushet is in error when he states that it will purify iron. It has been proved that Mr. Bessemer's method does not furnish good steel from iron containing either sulphur or phosphorus. There is no known reason for believing that pig-iron containing manganese would have the effect either of separating these substances from iron, or of neutralising their injurious influence upon the characters of the metal, whether in the state of steel or of malleable iron. These are simply the grounds upon which it was considered that Mr. Mushet's method was inadequate to effect the alleged result.

The analogy between Mr. Mushet's method and that introduced by Mr. Heath would appear, from subsequent remarks that he has made, to be greater than was implied in the former article. Manganese combines with carbon in the same way that iron does, producing what is well known to chemists as carburet of manganese, a white, brittle, metallic looking substance, precisely similar to the white pig-iron known as *spiegel-eisen* to the Germans, is produced by melting oxide of manganese with carbonaceous substances, and it is very probable that what has been described as metallic manganese, until very recently, was, in fact, carburet of manganese. Mr. Mushet has not stated how he obtained the metallic manganese used in the production of steel, according to his last patent; but although he disclaims the use of carburet of manganese, it is certain that the manganese in the pig-iron, or carburet of iron, which he proposes to use, is in the state of carburet. This being the case, his method acquires very much like identity with Heath's method, for the fact of the carburet of manganese being mixed with carburet of iron can hardly constitute an essential difference between the two.

Mr. Mushet's statement about black-lead, or plumbago, being carburet of iron is totally incorrect. This substance is carbon, with an admixture of iron, varying from 1 to 3 per cent. So likewise the statement that there "is not the slightest ground for supposing that carburet of manganese ever existed, or that it ever can be formed," is merely flying in the face of fact. But when Mr. Mushet ventures to censure eminent chemists for calling the compound of iron and carbon carburet of iron, he places himself beyond the pale of tolerance, and renders himself liable to serious reproof. The carburet of iron, known by the name of pig-iron, is not an alloy, this term being applied only to compounds or mixtures of metals, and carbon is not a metal. The metallic appearance of the carburets of iron and of manganese would seem to have misled Mr. Mushet; he probably is not aware that this appearance is not a positive proof of metallic nature. The small cubic crystals sometimes found in the hearths of blast furnaces, and presenting a perfect metallic appearance, closely resembling copper, do not consist of a metal, but of compounds of a metal, with nitrogen and cyanogen.

Again, the statement that the addition of carburet of manganese to cast-steel, while melted, has the effect of spoiling the steel, is in direct contradiction of experience, and it is inconsistent with the fact that the addition of a mixture of oxide of manganese and carbonaceous substance, under the same circumstances, improves the steel. In both cases the result would be exactly similar, for the mixture would furnish carburet of manganese. This is merely the Heath question over again.

The alleged removal of the cellular character of steel or iron ingots produced by Mr. Bessemer's method, by the addition of pig-iron containing manganese, has already been characterised as improbable, as well as the statement that such ingots, obtained from average British coke pig-iron, are thereby rendered capable of being forged and worked without any indication of red or cold shortness; and the reasons for doing so have been given. Without, however, venturing to offer an opinion as to whether ingots of iron or steel obtained by Mr. Bessemer's method may or may not be drawn into sound bars, it may safely be stated, as within the writer's knowledge, that sound bars of steel may be obtained from such ingots, and that when the pig-iron is free from phosphorus or sulphur, those bars are neither red-short nor cold-short, or in any way inferior to the best quality of cast-steel, and that without Mr. Mushet's method having been applied to them.

It has been positively proved that the cellular character of the ingots is due to the evolution of gas which has been collected and analysed. This gas is carbonic oxide, which seems to be dissolved by the melted metal, in the same way that oxygen is dissolved by melted silver. The presence of carbonic oxide does not in any way indicate that oxide of iron is mixed with the metal. In the experiments which the writer has made, the cellular character was the same in the case of the steel and iron ingots, and not, as Mr. Mushet describes, proportionate to the privation of carbon. If cells never occurred except when oxide of iron is present in the metal, why are the ingots of steel, containing 1·5 per cent. of carbon, quite as cellular as ingots of wholly decarbonised iron? Chemistry teaches that at the temperature of the converting vessel oxide of iron cannot co-exist with carbon or carburet of iron in the form either of steel or pig-iron. But Mr. Mushet is ready with the assertion, that carbon can only decompose oxide of iron at a cementing heat, not at a higher temperature, and that manganese alone can do this. None of these statements have any other foundation than Mr. Mushet's imagination.

The account given of the cellular character of the ingots is very ingenious, and might be worth consideration if it had any kind of relation to fact. The opinion also that the defective character of malleable iron produced by Mr. Bessemer's method, is due to its being mixed (not alloyed, as Mr. Mushet incorrectly terms it) with oxide of iron, though probable, is merely an hypothesis. Burnt iron is a fact with which every iron-worker is familiar, and, therefore, the phrase is not absurd, though there may not be any scientific interpretation of it given. For Mr. Mushet's information, it may be stated that the description of a metallic substance containing 6·79 per cent. of oxygen and 93 per cent. of iron is recorded in chemical works, and if he has any further evidence of the presence of oxygen in what is called "burnt iron," or of the volatilisation of iron, it would doubtless be received with great interest.

It is impossible that Mr. Mushet can have failed to peruse the letters of so earnest a supporter of his claims as "Sideros," and he must be aware that writer has clearly implied that Mr. Mushet's method would effect separation of sulphur and phosphorus, since he states that coke pig-iron will thereby furnish good steel, without attempting to controvert the received opinion that either of these substances, even in very minute amount, renders steel good for nothing. Mr. Mushet now says he does not pretend to separate those substances; and it must be supposed, consequently, that the purification of iron is regarded by him as unnecessary. The analytical results which he gives, as representing the composition of "one of the toughest bars of cast-steel ever made," are at variance with all other analyses of good steel. If that steel contained 0·284 per cent. of sulphur, and the tin-plate bars sent to the office of the *Mining Journal* contain 0·25 per cent., Mr. Mushet is right in saying that "received metallurgic ideas are not always established by facts," and equally right in the opinion that the plate worker should disregard this analytical fact.

It is precise facts that are wanted in this case before it can justly claim a moment's notice. Mr. Mushet comes before the public as the inventor of a method which, according to his own account of it, is directly antagonistic to all that is known of the subject. What would be the position of an astronomer who should announce the discovery of a new planet, or of a chemist who should assert the compound nature of a substance previously recognised as elementary, and without, at the same time, making known the observations and experiments which proved the truth of what he advanced? The above-mentioned facts and conclusions, upon which an opinion has been based may, indeed, be liable to modification and correction by new lights. Mr. Mushet may be in possession of experience subversive of all that chemists and metallurgists have regarded as established in reference to the chemistry of iron and steel; but he must remember that statements, opposed to prevailing opinion and made without any reasonable explication, or without being proved, merely as matter of fact, must always be disregarded while supported only by individual assertion. Mr. Mushet seems to be mistaken as to the kind of proof required; it is not at all requisite to work with 4 tons, or even 4 cwts. of pig-iron to furnish what is wanted. Half a dozen analyses by a trustworthy chemist of the pig-iron used, and of the good steel obtained in his presence, with the results of working tests of the metal, would settle the question. If from such analyses and tests it should appear that average British coke pig-iron, containing sulphur and phosphorus will, by Mr. Mushet's method, yield steel free from these substances, the value of the invention would be placed beyond question. Or, if it should appear that the steel which he produces, contains sulphur and phosphorus, he would have the merit of having exploded an erroneous opinion that has hitherto been regarded beyond question. In either case he would very far have eclipsed Mr. Bessemer, both as regards novelty and utility. Until this is done in a way free from all possibility of objection, Mr. Mushet may rest assured that his invention will not receive the recognition which he claims for it; and until this is done it is impossible to devote any further space to the mere discussion of statements and opinions upon the subject.

INFLUENCE OF MANGANESE UPON THE CHARACTERS OF IRON AND STEEL.

Manganese is very frequently associated with iron in its various forms of pig, bar, and steel, and originates principally from admixtures of oxide of manganese in the ores, except in the case of English cast-steel, which sometimes contains nearly 2 per cent. of this metal, and in the production of which manganese is purposely added. The fact that manganiferous iron ores, especially spathose ore, yield pig-iron especially adapted for producing good steel, appears to have been first observed in Germany, where such ore is known by the name of "stahlstein," or steel-stone. This fact could not have been referred to the presence of manganese until after 1740, when manganese was first ascertained, by Pott, to be a peculiar metal; since then the fact has been much misconstrued.

Although there are not any precise data to throw light on this subject, still a great diversity of opinion prevails among metallurgists as to the particular influence of manganese upon the different forms of iron. Some have maintained it to be an essential constituent of steel, and have assumed that the production of malleable iron or steel from manganiferous pig-iron depended merely upon the, more or less, complete separation of the manganese during the decarbonisation.

On the other hand, it has been shown that, in some instances, the steel obtained from highly manganiferous ores does not contain a trace of manganese. One circumstance, by which the presence of manganese really appears to determine the excellence of the steel obtained from manganiferous ores, is the easy fusibility of the silicate of manganese constituting the slag furnished in the smelting of such ores. As a consequence of this the iron is more easily reduced; a very fusible, and at the same time very pure, pig-iron is produced.

More recent observations would appear to justify the idea that the presence of manganese in iron, or in the slags produced during certain stages of the conversion of pig-iron into steel or malleable iron, favourably influences the product obtained, even though it may not contain manganese as an alloy. The capability of welding in cast-steel, and the greater extensibility of bar-iron produced under such conditions, are well-established facts, but the nature of the influence exercised remains obscure.

The first mention of the intentional use of manganese in this country is to be found in the specification of a method for which a patent was granted in 1799, to William Reynolds, of Ketley, Shropshire, for "preparing iron for the conversion thereof into steel." He proposes to mix oxide of manganese with the materials from which the pig-iron is obtained; also with the pig metal in any of the operations for converting it into malleable iron.

Mr. Webster, in referring to this patent, in his account of Heath's case, states that the oxide of manganese was also to be used in the conversion of pig-iron into steel; but this is an error; steel is spoken of only as the ultimate product which was to be obtained, by the method of cementation, from malleable iron that had been "prepared" for that purpose according to this method. The same error is made in the Abstracts of Specifications relating to iron and steel, published by the Commissioners of Patents.

Nine years afterwards, a patent was obtained by John Wilkinson, of the Bradley Ironworks, at Bilston, for a method essentially identical with the previous one, but extending only to the smelting operation.

In the specification of a method for which a patent was granted in 1819, to John Thompson, of Ley Hall, Shropshire, for obtaining pig-iron in a reverberatory furnace, the use of manganese is incidentally mentioned. He recommends it as being "a great auxiliary in fusion; having, moreover, an affinity for the earthy, flinty, and calcareous parts of the ore, and tending much to vitrification; but particularly in improving the quality of the iron." He refers to the successful use of manganese in the blast-furnace in England, but expresses an opinion that it is more efficacious in the air-furnace.

Charles Schafhaütl obtained a patent in 1835 for the use of manganese, together with salt and clay, as an adjunct to pig-iron during the puddling operation.

Chloride of manganese was proposed to be used both in the refinery and the puddling of pig-iron, under a patent granted to Edward F. J. Duclos, of Samson, Belgium, upon the assumption that it would effect the separation of sulphur and phosphorus by the production of volatile compounds of these substances with the chlorine; while the manganese combining with the iron would produce an alloy which, both in physical and chemical character, would bear a close resemblance to the best qualities of malleable iron produced by the use of charcoal.

The next method of this kind, for which a patent was obtained in 1838, by Charles Bourjot, is perhaps the most interesting of all those relating to this subject prior to Heath's invention. From the title of the patent, and incidental remarks in the specification, it would seem that the inventor's aim was to produce malleable iron. Thus he says:—"If it were possible to take away from the cast metal its principal defect, which is that of being brittle, and impart to it the principal quality of malleable iron, it would follow that by the simple process of moulding all the workmanship would be done away with," and thus the cost of wrought-iron articles would be reduced.

The inventor's method consisted in melting pig-iron, charged in alternate layers with a mixture of oxide of manganese and charcoal, into earthern vessels that were to be kept at a red heat for two or three days, in a furnace similar to a potter's kiln. He states that when these vessels are withdrawn the metal is found converted into malleable iron, suitable for all work where forged iron is used, and as a substitute for bronze in all castings. To judge from this description of the product, it does not appear that it was malleable iron, nor is there any probability, from the nature of the method, that it would furnish malleable iron. It is more

likely that the product obtained would be a soft steel; much, however, would depend upon the relative proportions of oxide of manganese and charcoal, as well as upon the amount of this mixture with which the pig-iron was melted. The principle of the method, as understood by the inventor, is not at all apparent; but it is certain that he held erroneous opinions as to the chemical nature of oxide of manganese, since he speaks of this oxide as one that cannot be reduced to a metallic state. If the opinion is correct that the metal obtainable by this method was steel, it is clear that it would, in point of fact, though perhaps unwittingly, be an anticipation of Heath's method of producing steel.

No mention appears to have been made of this method in its relation to Heath's patent for the use of carburet of manganese in the production of cast-steel, but this fact is perhaps less remarkable, since from the terms of the specification it was intended for the production of malleable iron, and no allusion whatever is made to steel. With this single possible exception, the use of manganese in the actual preparation of steel is not referred to in any of the specifications of methods of making steel or using manganese. The use of manganese in the production both of malleable iron and steel was a considerable feature of all the methods for which a patent was granted in 1839 to Josiah M. Heath. In the conversion of pig-iron to malleable iron, sesquioxide of manganese was to be added to the melted metal in the puddling furnace, to the extent of from 1 to 5 per cent. In the production of steel directly from pig-iron, oxide of manganese was to be used, in quantities not exceeding 5 per cent., for the purpose of facilitating the decarbonisation of pig-iron while being melted in a cupola furnace. Further, for the purpose of obtaining an improved cast-steel, carburet of manganese was to be introduced into the crucible, together with the other materials, to the extent of from 1 to 3 per cent.

It will be seen, therefore, that as regards the use of oxide of manganese in the puddling operation, Heath had been anticipated forty years previously by Reynolds. The use of a mixture of oxide of manganese and charcoal by Bourjot could not probably be regarded as in any way interfering with the validity of Heath's patent as regards steel, since no mention was made of steel. It is clear, however, that carburet of manganese would have been produced by the reduction of the oxide, by either the carbon mixed with it or that contained in the pig-iron.

The carburet of manganese used by Heath is a compound of manganese with carbon, precisely analagous to white pig-iron, which is a carburet of iron. Metallic manganese has probably never been obtained in a pure state till very recently, and the method of effecting this is described in another column.

THE COPPER TRADE—FLUCTUATIONS IN THE STANDARD.

[FROM OUR CORRESPONDENT IN WEST CORNWALL.]

JAN. 6.—The standard, at the sale of copper ores at Redruth, last week, slightly declined, but it is expected very soon to advance again, although no very decided improvement is likely to take place until the revival of trade enables the smelters to increase the price of fine copper.

Shares have changed hands in several mines during the past week; but most persons, who can afford to do so, prefer to hold on for the present, as there is a general expectation that in the spring mining affairs will be in a much better position, and higher prices for shares be realised. It is the opinion of one of the most experienced bankers in Cornwall, that money will be at 3 per cent. before Lady-day. Should this be the case, we may expect to see a period of activity in trade and in mining undertakings again set in, such as we have not lately seen, accompanied with a rise in the copper standard, and in the price of other metals, which cannot but be exceedingly beneficial to the mining interest of the county.

The last sale of copper ore for the year 1857 took place at Redruth on Dec. 24, and it may be well now to exhibit the fluctuations of the standard throughout the entire year, as compared with the variations in the price of fine copper:—

Date.	Standard.	Produce.	Ore copper.	Cake copper.
Jan. 1	£150 12	7¼	£112 18	£126 0
8	155 15	6¾	114 8	126 0
22	159 17	6	114 8	135 0
29	162 4	6⅜	118 14	135 0
Feb. 5	160 18	6½	116 13	135 0
12	154 10	6¾	112 19	135 0
19	156 19	5⅞	108 11	135 0
26	153 16	6¼	109 8	135 0
Mar. 5	150 3	6¼	109 7	135 0
12	146 12	6¾	106 5	135 0
19	149 1	5¾	101 6	135 0
26	147 6	6½	103 10	135 0
April 1	147 10	6¼	103 10	135 0
9	147 4	6⅝	105 7	135 0
23	150 10	5½	100 14	135 0
30	146 10	6½	104 7	126 0
May 7	145 2	6¾	105 3	126 0
14	145 6	6¾	104 12	126 0
21	143 14	6	97 14	126 0
28	142 8	6⅛	97 12	126 0
June 4	137 7	6¼	92 1	117 0
11	129 8	6¾	89 0	117 0
18	133 13	5¾	85 9	117 0
25	131 14	6¼	87 18	117 0
July 2	129 15	6⅜	88 8	117 0
9	128 6	6⅞	88 12	117 0
23	133 18	6	88 9	117 0
30	135 15	6¼	91 4	117 0
Aug. 6	139 8	6¾	96 11	117 0
13	140 8	6¾	99 15	117 0
20	146 6	5⅞	99 19	117 0
27	145 5	6⅞	105 16	121 10
Sept. 3	145 10	6¾	105 0	121 10
10	147 15	6½	105 8	121 10
17	142 4	6	103 7	121 10
24	144 10	6¼	102 2	121 10
Oct. 1	142 19	6¾	99 16	121 10
8	139 10	6¾	98 12	121 10
22	137 18	6¾	92 18	121 10
29	132 8	6¾	89 12	121 10
Nov. 5	129 3	6¾	89 1	121 10
13	124 11	6¼	79 14½	121 10
19	124 19	6¼	79 15	121 10
26	124 12	6¾	81 11	121 10
Dec. 3	127 14	6¾	84 13	121 10
10	123 14	6¾	81 9	107 10
17	124 18	6¾	81 15	107 10
24	127 5	6½	84 17	107 10

The column headed ore copper is the one which immediately and distinctly exhibits the variations of the standard throughout the year, the ore copper being the price given by the smelters each week for as much ore as would make a ton of metal, according to their own assays. The column headed cake copper show the different prices at which the smelters have sold to consumers during the past year. The ore copper is, therefore, the buying price, and the cake copper the selling price of the smelters. It would be unfair to compare the buying with the selling price in any one particular week, because the ore bought cannot be immediately transmuted into metal and sold. But it is fair to compare the buying with the selling price throughout the year, and to take an average of the whole, in order to form some idea of the smelters' profits. Now, it will be found on calculation that the average difference between the buying and the selling prices throughout the year amounts to 24*l.* 17*s.* per ton of metal, out of which the smelters have to pay expenses of carriage and smelting, and the rest, to a very large amount, remains as profit. In addition to this, the smelters have the advantage of receiving 21 cwts. to the ton instead of 20 cwts.; and they have also the profit accruing from the assays, inasmuch as the furnaces, as a general rule, turn out more copper than the assays indicate. The profits of the smelters must be, on the whole, enormous, and fully account for those of them who have capital to work with making immense fortunes. One or two of the rich firms are now gradually swallowing up the smaller companies, who embarked with insufficient capital, or engaged in other speculations, which proved unfortunate and broke them down. It is stated in the West, on good authority, that the Devon Consols Company were in treaty for the purchase of the Spitty Company's Smelting Works, that firm having failed; but the great smelting company of Williams, Foster, and Co. stepped in and became the purchasers; so that here is another company merged in the Williams', or the Williams' and the Vivians combined. The Williams' are already owners of the Crown Company, which formerly existed as a smelting firm, and it is stated they have also the majority of the shares in the Mines Royal Company. Thus any competition amongst the smelting firms is less likely than ever, inasmuch as two or three of the companies can now rule the trade. It is quite clear—unless the smelters act on fair business principles, and are contented with reasonable profits—that the miners will have to take the initiative in the formation of a smelting company; and if it be not done soon, they may find themselves driven to it, at a future period, for their own protection, after they have sustained great losses by the existing smelters' monopoly. On the other hand, if the smelters can by any means show that they only realise reasonable profits, probably no new company will be formed to interfere with them. The general course of their trade, however, has been such as to leave a strong impression against them in the mining districts.

I have stated above that the average difference between the buying and the selling price of copper in the past year has been 24*l.* 17*s.* per ton. In the year 1856 the average difference was 23*l.* 17*s.*, so that the smelters have profited by the miners 1*l.* per ton of metal more in 1857 than they did in 1856. The difference is not much, being about 1*s.* per ton of ore less to the miner; and, considering the dullness of trade, such a difference might have been expected. At the same time, the question arises—cannot the smelters do with much less than a difference of 24*l.* per ton between the buying and the selling price, and still make good profits? Some persons are of opinion that they could do with half that amount; and, if so, it is not surprising that they accumulate such great fortunes. That the Devon Consols and eastern mines should endeavour to obtain works to smelt for themselves, is not to be wondered at. The 24*l.* 17*s.* per ton difference between the buying and the selling price of copper, as mentioned above, applies only to the western mines; if the average be taken of the prices given for ores sold by the eastern mines throughout the year, it is found that it amounts to 27*l.* 18*s.* difference between the buying and the selling price of copper; or, in other words, 3*l.* less per ton of metal, on the average, was given by the smelters for the eastern ores than for the western, being at least 3*s.* per ton on the ore sold. Probably the eastern mine managers may think that there need not be so much difference, and it is a matter they should look into.

REPORT FROM MONMOUTHSHIRE AND SOUTH WALES.

[FROM OUR CORRESPONDENT IN SOUTH WALES.]

JAN. 7.—The present week is likely to witness a termination of the strikes, which have now disturbed the district for some time past. At Aberdare, a portion of the men still hold out, and there is a prevalent impression among them that the masters will yield, and allow them to go on working at the first reduction, of 15 per cent. We need not intimate how hopeless such a thing is; there is no probability whatever of anything being done under the 25 per cent., and plenty of hands can be procured at this. The masters, however, display no anxiety to re-light the furnaces at present, nor till fresh orders arrive will they care to take back the whole of their former staff. Several meetings have been again held this week, and the usual inflated nonsense talked at them, but there is no really new or interesting feature to record.

As we reported last week, the Monmouthshire colliers seemed likely to follow the example of those in Glamorganshire, but fortunately the greater part of them have since returned to work at the reduction. At Abersychan, Varteg, and Golynos, quietness is restored; and the Pontypool men, though not yet at work, evince every disposition to do so: they have signified their willingness to take the proposed terms, and when some necessary repairs to the foundries, &c., are completed, they will doubtless resume business. Want is beginning to be felt among them, and subscription lists have been opened for their relief, but no very large amount can be collected.

We mentioned in a former letter that notice of dismissal had been given to all the hands engaged at the Risca Works, to take effect last month. The proprietor, however, Mr. Hookey, has now resolved to keep them on at the first reduction, provided they will accept the second if the other colliers in the county do. This judicious arrangement will probably answer the purpose contemplated.

A terrible boiler explosion occurred at the Abersychan Ironworks on Tuesday. The boiler was attached to the winding engine of the "Peters'" old pit, and was of large size. The engineer inspected it about twelve o'clock, and found everything right, but in a few minutes afterwards it exploded, and massive pieces were hurled 20 and 30 yards distance. A man who was replenishing the fire was burnt to death, and two boys who were walking together about 15 yards off were struck by a fragment and immediately killed. The cause of the accident has not been ascertained.

The men employed at the Cwmbrian Works have accepted the reduced wages, without resorting to the expedients of their neighbours. We have had on several occasions to comment the admirable manner in which Mr. Lawrence, the proprietor, preserves a good feeling between himself and his hands, and on this occasion it is again shown in a marked degree.

The tin works at Tydee and Pontymoile are have stopped, in consequence of the slackness of trade. Those at Pontymoile are doing but a slight business; and this department of trade is in a very depressed state throughout the district.

A man has been fined at the Neath Sessions, for employing boys in mines, contrary to the statute.

The blowing-engine and rolling-mill at the Dowlais Works are particularly remarkable for their great size, the blowing-engine being the largest of its class hitherto erected. They were designed for turning out a large quantity of work, with the greatest possible security from risk of failure, or deficiency of blast, or breakage of machinery. The blowing-engine was erected in 1851, and has a cylinder 144 inches diameter, with a stroke of 12 ft., making 20 double strokes per minute, the pressure of the blast being 3½ lbs. per square inch. The discharge-pipe is 5 ft. diameter and 140 yards long, thus answering the purpose of a regulator. The area of the entrance air-valves is 56 square feet, and of the delivery air-valves 16 square feet. The quantity of air discharged at the above pressure is about 44,000 cubic feet per minute. The steam-cylinder is 55 in. diameter, and has a stroke of 13 ft., with a steam pressure of 60 lbs. per square inch, and working up to 650-horse power. The steam is cut off when the piston has made about one-third of its stroke by means of a common gridiron valve. The cylinder ports are 24 in. wide and 5 in. long, and the slide-valve has a stroke of 11 in., with ¼ in. lap. The fly-wheel is 22 ft. diameter, and weighs about 35 tons. Eight Cornish boilers are employed to supply the steam, each 42 ft. long and 7 ft. diameter, made of 9-16ths best Staffordshire plate, and having from end to end a single 4-ft. tube, in which is the fire-grate, 9 ft. long. The engines for driving the new rolling-mill are a pair of high-pressure, coupled at right angles. The steam-cylinder is 45 in. diameter, 10-ft. stroke, 24 double strokes per minute; each cylinder has common slide and expansion-valves. These engines will drive one rail-mill, capable of turning out 1000 tons of rails per week; another mill, capable of making 700 tons of rails or roughed-down per week, and one bar or roughing-down mill, capable of making 200 tons per week; they will thus readily turn out 2000 tons of iron per week. Two blooming-mills, with three high rolls and two hammers, will also be worked by the same engines. The mill will roll iron of such sections and length as have been hitherto unattainable, although frequently required in engineering works of any magnitude.

The melancholy demise of Mr. Rice Hopkins has entailed some responsible duties on your able correspondent, Mr. Evan Hopkins, C.E., who has undertaken, at the special request of the executrix and other friends of the deceased, to superintend, as the chief engineer, the completion of the works Mr. Rice Hopkins was engaged on—among others, the Llanidloes and Newton Railway, and the Somerset Mineral Railway.

REPORT FROM YORKSHIRE, DERBYSHIRE, AND LANCASHIRE.

[FROM OUR CORRESPONDENT IN CHESTERFIELD.]

JAN. 7.—The improved aspect of the money market has created more confidence in the early return of a prosperous trade, but the recent crisis has so completely paralysed commercial action, that, should the most favourable features present themselves, some time must elapse before the effects of the depression are wholly removed.

In the Iron Trade, during the week, a more cheerful tone has prevailed, and orders, which were held back on the preliminary meeting, have now been given out, but they have been generally of limited amount, and adapted to immediate requirements. The demand for pig-iron has been inactive, and prices are a shade lower.

The weather for the latter part of the week has been so severe, that such an impetus has been given, especially in London, to the household demand for coal that an advance of 2*s.* 6*d.* per ton was obtained on Wednesday. The enquiry in Derbyshire and South Yorkshire has been tolerably good during the week, and in some instances prices have been raised.

The state of affairs at the extensive collieries at Staveley is lamentable. There are no less than three pits in which the work is suspended, two having been stopped by an accident, and which yielded about 600 tons daily. Mr. Barrow, the proprietor, having several extensive contracts, has been put to considerable loss and inconvenience, owing to his inability to meet the demand from his own works.

The bodies of four of the twelve sufferers at the Hollingwood Pit have not yet been recovered, and it is uncertain when the operations at the pit will be in such a state as to admit of the stopping being removed. It has been decided to put in new tubing in the other pit, which will prevent its being worked for some time to come.

A serious accident happened at Mr. Turner Ward's colliery, at Killamarsh, on Wednesday morning, which has resulted in the immediate death of four persons. It would seem that the men lighted a small fire near the drum-shed of the colliery, to keep the oil on the spur wheels from freezing, and that, during Tuesday night, it ignited the wooden roof of the shed, and was not discovered until about 11 o'clock, when it had burnt almost through it; and had also burnt the rope and elbows of the drum. The rope was blackened and charred, and the tar in it had become brittle. The engine-man, Wm. Truswell, and the bottom-steward, Chas. Mullinder, with one or two other colliers, examined the rope, and though they thought it was injured, they judged it to be safe enough to let the men down the shaft, which is nearly 100 yards deep. Four sets of men, of four each, were let down, and as the four deceased were going down, the rope snapped in twain, and they were precipitated to the bottom, and killed instantaneously. An inquest was held on the bodies on Thursday (this day), before Mr. Busby, coroner, Mr. Hedley, the Government Inspector, being present, when a large amount of evidence was adduced, which showed great laxity and want of attention to the general discipline of the pit. The engine tender, the underground steward, and the banksman, did not know the rules, and the two latter could neither read nor write. The inquest was adjourned, and Truswell, the engine tender, and Twigg, the banksman, were ordered into custody by the coroner, to be brought before the magistrates on a charge of manslaughter.

The *Derby Reporter* gives the following report of an important case to colliery managers:—On Monday, at Smalley, Mr. Hedley, the Government Inspector, charged two of the Butterley Company's agents with breaches of the special rules. Mr. Smith, the principal underground agent, was charged with neglecting to see that an air-door was immediately put where required in a certain heading on Oct. 1; also with neglecting to order safety-lamps to be used, and naked lights excluded, when danger was apprehended from a large body of fire-damp. Mr. Smith admitted the offences, and was fined, with expenses, 2*l.* 7*s.* 3*d.*—Mr. Clarke, deputy to Mr. Smith, was charged with neglecting to fix a danger signal, with "Fire" painted thereon, in a certain heading filled with fire-damp; also with trying the workings for fire-damp with a naked light, contrary to the special rules. Fine and expenses, 4*l.* 7*s.* 3*d.* It is to be hoped that the colliery managers in this district will not, by their neglect, place the Inspector in the unpleasant position of having to take proceedings for breaches of the Inspection Act. Although Mr. Hedley may show every kindness, and give every assistance to managers who comply with the Act, he will not, we feel assured, spare those who jeopardise life by any neglect in the management. The magistrates intimated that, if Mr. Hedley had occasion again to bring any manager before them for breach of rules of the Act, they might take more severe steps, and punish by committing the offending party to prison.

The Midland Mine, at Ashover, has been purchased by a new company, who intend to work it: they have issued a prospectus, offering the public shares at 1*l.* each. The Mill Dam Company will enter into possession of their property on Tuesday next, after which the company will employ their own workmen, and conduct the works vigorously; the scrip is in the hands of the Barmaster, and will be issued next week. The Mill Town Mine, at Ashover, is doing well, and will pay its first dividend shortly.

The directors of the Great Northern Railway are said to be about taking steps to suspend their present system of coal traffic, or, at any rate, to modify the regulations under which the public are supplied with coals. For some time past, the Great Northern have had the monopoly of the Barnsley coal field, so far as the London supply was concerned, purchasing the same through Mr. Herbert Clarke, their agent, and selling it for their own benefit to the public, both at the King's Cross coal drops and other stations. Should the contemplated alteration be made, the result would be that instead of the Great Northern being the dealers, the coal proprietors themselves and dealers would send their coals to the various "drops," and be advantaged by the competition that must necessarily ensue. The railway company would certainly be no losers, and by it the monopoly which was especially complained of in the last report of the coal fields of South Yorkshire would be broken down, and the trade of the district, as well as the working classes, be proportionately benefited.

THE IRON AND COAL TRADES OF STAFFORDSHIRE.

[FROM OUR CORRESPONDENT IN WOLVERHAMPTON.]

JAN. 7.—The time which has elapsed since the crisis in trade commenced is too short to allow of any very decided improvement, or any large influx of orders. Extremely little is now being done throughout the district, but grounds for hope with respect to the future begin to appear. The prospects from America gradually improve; the removal of so many unsound firms will shortly, it is to be hoped, lead to a feeling of greater confidence in those which have been able to sustain the pressure to which all have recently been subjected. Lower rates of discount will lead to many public enterprises being entered into which were only postponed on account of the high rates of interest which prevailed, and boards of health and other bodies will probably do well to commence permanent works as soon as they can borrow money at low rates, as they will be able to execute them cheaper now that money, materials, and wages are lower, and they will, at the same time, give employment to many who would otherwise be living upon the produce of the poor-rate, without giving in labour any adequate return for their support.

On 'Change to-day, at Birmingham, pigs were rather firmer; but the extremely exceptional state of things prevailing,—insolvent firms, working under inspection, being forced to sell pigs in order to find money for wages, and other firms whose resources are so limited that they are compelled to sell at the best procurable price,—render the quotation of prices difficult. Makers of best qualities refuse less than 3*l.* 15*s.* per ton.

The failure of Messrs. Frederick Giles and Co., proprietors of malleable ironworks at Dudley Port, was reported on Wednesday. Their liabilities are estimated at about 32,000*l.* Rumours of another failure in the neighbourhood of Bilston also prevail, and it is not clear that the list of suspensions in this district is yet complete. A petition for protection under the private arrangement clauses of the Bankruptcy Act, promoted by Messrs. Riley and Son, on their own behalf, came on for hearing at Birmingham to-day, but was adjourned for three weeks, at the instance of the creditors, who appear dissatisfied with the dividend the firm offers.

A statement of the affairs of Messrs. Woodhall and Smith, of the Wrondmill End furnaces, near Dudley, whose suspension was announced some time ago, has been sent to their creditors. The firm have from the first been desirous of paying 20*s.* in the pound, and as soon as possible after the ir failure submitted a statement of their affairs to the Wolverhampton and Staffordshire Bank. The statement of their affairs show the liabilities to be 69,627*l.*, and the assets 27,792*l.* The large deficiency of 41,835*l.* is accounted for by the outlay upon the colliery and furnaces, and bad debts. It is calculated that the firm will be called upon to meet bills endorsed to the extent of 21,466*l.*, and 21,000*l.* was expended in opening the colliery. The solicitor of the Wolverhampton Bank, Mr. Robinson, states that the directors are perfectly satisfied with the way in which the firm have transacted their business, remarking that their personal expenses have been moderate. Mr. Aston was employed by the bank to make an inspection of the mines, and Mr. Henry Marten (of the firm of Dimmack and Marten) prepared a report respecting the blast furnaces. The result is, that Mr. Aston calculates that by an outlay of 3000*l.* on the mines, at present wages and selling prices, a profit of 6000*l.* a year, for six years, may be made from the mines, supposing them to be worked in connection with the blast furnaces. Mr. Marten's report respecting the latter is in substance, that from an examination of the expenses of producing 20,000 tons of pig-iron during the past year at these furnaces, he has come to the conclusion that the good quality of pig-iron which they make can be produced at 3*l.* 14*s.* 7*d.* per ton; and supposing that this may be expected shortly to sell at 4*l.*, and be sold to safe parties, that the furnaces may be worked so as to be "profitable customers to the mines." It does not appear, from this report, that much profit could be realised beyond the 6000*l.* yearly from the mines, and this would require about seven years to meet the deficiency, supposing no losses occurred, and making no allowance for the difficulty of working with the restriction which the lack of capital imposes.

The notice to puddlers and millmen for a reduction of wages expires on Saturday next. It is not thought likely that the men will resist. In North Staffordshire the strike of the colliers is entirely over, but many of the men employed in the ironworks still resist the reduction, but no further breach of the peace has occurred.

General slackness prevails in the Hardware Trades of this district and of Birmingham, partly the result of the season, but aggravated by the general depression throughout the country. At this period travellers are only just starting on their journeys, and orders are necessarily few. The Walsall trade has not suffered so much as others; but amongst those engaged in the various trades, whether in Birmingham, Wolverhampton, or other towns in this locality, there has been an almost total absence of failures.

The Tin and Japan Trades are slack at present, but good hopes are entertained of a revived demand being shortly experienced. From the fact of tin being firmer on the Continent, and the probability of the United States shortly requiring a large supply of tin-plates, a further reduction in block tin is not deemed very probable. As an indication that the recent commercial disasters are rather the necessary result of an unsound course of business among a limited class, who have been trading on a fictitious credit, it is stated that payments are met by the customers of the manufacturers and wholesale houses with very satisfactory promptitude. It is to be hoped that the unsoundess was rather a local disease of the commercial body, than one affecting its vitality; and, as in physical diseases, the skilful and remorseless excision of the parts affected will prove the safest and most effectual mode of treatment.

The Wolverhampton Bank has come to a most satisfactory determination to discount no bills having more than ninety days to run. It is be hoped that other banks will follow this salutary example. It may be stated, that the above bank is calling in its notes, which, as was generally supposed, cannot be re-issued.

On Monday, Mr. John Henderson, of the late firm of Fox and Henderson, the contractors for the Crystal Palace, died at his residence near Smethwick. The failure of the firm, and the consequent closing of the London Works some months ago, was felt as a great misfortune in this district, and, looking at its great eminence, excited very great regret in the county. Mr. Henderson has the character of having been a most able and energetic man of business. He had not reached the age of forty-seven years, when he was cut off by an internal inflammatory disease.

A meeting of the proprietors of the Worcester and Birmingham Canal was held on Tuesday. The receipts for the year ending Nov. 30, showed a falling off to the extent of 350*l.*, as compared with the preceding year. A dividend of 10*s.* per share, free of income tax, was declared.

THE COLLIERY EXPLOSION NEAR BARNSLEY.

The adjourned enquiry into the circumstances attending the death of George Chappil and Richard Turner, at the Strafford Colliery, was held on Tuesday, at the Pheasant Inn, Dodworth, before Mr. Thomas Taylor. Mr. Morton, the Government Inspector, was present. Mr. Hamer, solicitor, appeared on behalf of the proprietors of the colliery. The evidence showed that there was great laxity in the management of the colliery, and that the rules in many instances were a dead letter.

In examination by Mr. Morton, Samuel Stears, the steward, acknowledged that there was no real deputy in the night shift. Witness was responsible for the ventilation in the pit.—George Rhodes, a miner, after the gas had fired at his lamp, told William Carr, the deputy, that there was more sulphur than there should be, but Carr paid no heed and walked on; and witness said he had found fault with miners for blowing out their lamps.—Thomas Field, a hurrier, said that the deputy, William Carr, had been with him when the gas was fired below the scaffold. Witness told Mr. Stears that the place was not fit to work in on account of gas; Stears replied that it was no worse than usual. Both Stears and Carr saw it in a fiery condition; and Carr was with witness when it fired. William Carr, deputy, said that he knew that rule nine required that they should have a deputy by night when working double shifts; but he never told Mr. Stears that they ought to have one. Witness knew the pit was "not pleasant" with 100 yards of the shaft unventilated; and that it was dangerous working with lights over the Parkgate scaffold; yet he never warned the men against taking lights there; they could do so if they liked. After some hesitation, witness admitted that the most experienced men were stationed there. Witness, with Mr. Stears, was responsible for the ventilation.—After some further evidence, the coroner summed up; and the jury, after a deliberation of five hours and a half, returned the following verdict:—"That the deceased, George Chappil and R. Turner, died from the effects of burns received in an explosion of fire-damp in the engine-pit at the Stafford Colliery; but the cause of the explosion is not proved. The jury are also of opinion that the evidence shows a gross want of care in the general management and ventilation of the pit, and incompetency of the steward."

We may state that the steward, Mr. Stear, had a narrow escape from a verdict of manslaughter, as ten of the jury were in favour of such a verdict, and stood out for several hours, but, on the Coroner being sent for to give some information on the law of the case, the verdict was returned as above. At the close of the enquiry, Mr. Smith, the managing partner of the Strafford Colliery, stated that they had, since the explosion, regardless of expense, engaged Mr. John Brown, an efficient mining engineer, who would, in future, have the management of the colliery, when he hoped that a recurrence of these fearful explosions would be avoided.—*Manchester Guardian.*

TUXFORD'S TRACTION ENGINE.—This extraordinary implement, which has within the last few days been exhibited in the streets of Boston, and in the neighbourhood, is exciting a great deal of attention amongst our practical agriculturists. It is a vast improvement upon the engine first exhibited; not only less cumbrous in appearance, but also in fact, while its tractive power has been considerably increased, and it answers to the driver with the docility of a well-broken steed. The workmanship appears to be very beautiful. We understand this spirited firm have another engine in course of completion which embraces many improvements, and combines all the desiderata of such implements in an eminent degree.—*Boston Herald.*

MANUFACTURING PROGRESS IN SOUTH AUSTRALIA.—Mr. George Wyatt, of the Adelaide Foundry, North Terrace, has just turned out of hand, in the short space of three months, a pair of high-pressure oscillating marine engines, of 20-horse power each, for the Murray River steamer *Bunyip*, the property of Messrs. Randell. The workmanship and general finish of these engines are highly creditable to the foundry, and it is a gratifying circumstance that such work can be produced in the colony. The boiler, which is to be made in Sydney, and which was ordered some time before the engines, has not arrived yet.—*Adelaide Observer: Sept.* 19.

MINING MEDIUMS.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—The choice of a subject, Mr. Editor, is an acknowledged difficulty. Politics and polemics present no new features; parliaments are summoned upon mere matter of form; indemnities for doing right contrary to law granted to the ministerial delinquents as a matter of course, and as a matter of social convenience, the collective wisdom of our favoured land is permitted to disperse itself into those intricacies of circles of which society is so ingeniously composed. Wisdom hath a holiday, and with edifying and Socratic mien is departed to the old-fashioned enjoyment of peace and plum-pudding. Shade of Lucullus! English hearts and English homes are open to your inspirations. Good fellowship and festivity are the presiding penates; and while the thrilling merry laugh of youth cheers our age, the sympathies, all bland and genial, thus awakened constitute an atmosphere peculiar to us, and in which I trust our national feelings are ever fated to mature and flourish.

This season is our own, and we enjoy it as a matter of right, with hearty good will. Good wishes and gratulations brighten on the *morals* of the land, and in the *usage* of these amenities I find none more justified by fact and truth than that which, in invoking continued prosperity to the *Mining Journal*, congratulates you on the position you have achieved for it in the scale of science and public utility. This point settled independently on both sides, I would observe that the readers of your columns can never complain of the dearth of theme to which I have alluded. The momentous matter is always in excess of sciolism and individuality; and although the cynic might dip his pen in gall, and with justice indict certain principles evident in the tone and tenor of some portion of your correspondence, the errors are palliated by—nay, forgiven—on account of their scientific association. Modern philosophers are, no doubt, a testy and irate genus, and by no means tolerant of diverse opinions. They never give and take in the placable spirit of their less gifted fellow-mortals; their theories are too Olympic for the admission of frailty, and each has his mental Hebe so constantly ministering to his special ideality, that the thinnest shadows become as crude and lusty realities. Such delusions are possibly very pleasing, but as they happen to interfere very seriously with the utility of men and matter, to the common order of intelligence they are exceedingly unprepossessing. You, Mr. Editor, have had for many years considerable intercourse with those elevated spirits, and, perhaps, you can account for the idiosyncracy through which scientific discussion among notabilities so frequently merges the gravest matter into a wretched cavilling about words personal and impersonal, vague, and unmeaning, as also into the very witlessness of retort. Could you influence a different attribute, you would do a great favour to us plain-thinking people—nay, you would considerably improve the illustrations of science, and by making them more intelligible favourably reverse certain opinions which several have formed of them. To meet on the level and part on the square is, perhaps, no unworthy suggestion for the new year; to reduce it to practice is ever easiest to the wisest and the best.

The commercial transition of this country at the present moment appears not to be so attentively studied by the mining community as it ought to be: an apathy the more reprehensible because unnatural to that intelligence essentially possessed by this industrial section of the British people, appears to dwell like grave-damp on their energies, and they now regard passing events—events which affect universally productive labour and enterprise—with a listlessness almost akin to fatuity. Is mining a perfect system? is it alone intact in that deluge of ill that has immersed to destruction some of the greatest commercial interests of the old and new world; and if incidentally affected, can there be constructed no ark to float it to higher grounds over the troubled waters? Surely it has some commercial principles to adapt to the changes and exigencies of the times, and to foster into future strength and magnitude; or are the wisdom and prudence it possesses merely adequate to the physics and not to the ethics of its industry? Something of a higher order is required for its future than the mine management, however improved, and the market speculations of the present—let all be assured of that; and further, should the proper ambition to win a better position for this labour exist, now is the moment to give it scope and action.

In financial matters a severe but serviceable lesson has been learned by this country. We have seen that the generality of disasters in this department are attributable to lax and inconsistent management; yet by such failures is the fact proved that banking, properly managed, is an accessible aid to sectional labour; and the full meaning of this assertion will be made at once evident by the question—Why should not mining have its bank? an establishment combining with its general business safe and peculiar availabilities in favour of such enterprise, and possessing a management so framed that an assessor, or some such officer, appointed by the body of shareholders, and of a professional and social standing superior to all and every influence except a justly commercial one, should scrutinise, and endorse with his approval, every proposition for loan, and every security offered, before the submitting of such by the manager to the board of directors. This would prevent thoroughly the deplorable events so lately witnessed. All this can be done by combination: combine firmly, prudently, and determinedly, and the public will combine with you. Now, What will you do with the smelters? *Crush them.*—How? *By refusing to supply them with copper.*—Can you afford to do so? Not a bit of it, under present circumstances, unless you are prepared to pass through the ordeal of the "belly and members;" a very unpleasant alternative, apply the moral as you please.

At the same time, permit me to tell you a plain and wholesome truth. Unless you mineral proprietors and successful adventurers cease to button up your pockets against the general good of the community to which you belong—unless you miners in general become less selfish, less uncharitable, and less unsympathising towards each other—and, having done this, unless you unite, as Christian and intelligent men should, for your common weal—you are incapable of bettering your condition, and unworthy of the providence which has already enriched your labour. Concentrate some of the capital you have achieved, trade upon it with foresight and prudence, and you will rapidly reach a point of prosperity from which you may shake your picks and gads at the smelters, and all the other monopolists of the universe. The smelters assail your interests, and make unceasing war on your labour; they are mounted on the high horse, and, trust me, you must unite and form square to repel such cavalry. It has just now been told me by a friend that Mr. N. Ennor has also suggested a bank; in that case, I value my own hint the more, and it becomes still more worthy of your prompt consideration.

As to our foreign relations, as far as practical mining is concerned, they are pretty nearly worthless. I do not, be it remembered, involve our colonies in so adverse an opinion. I allude particularly to the Continent and America, for having some considerable experience in such regional productiveness, and the *modus operandi* affecting it, I warn the mining and general public not to invest a single shilling, or a single energy, in the like foreign mining enterprise until they can afford to throw away money. For the present, at all events, it is much better to attend to our home affairs. By-and-bye, a few notions about the iron and steel questions, certain German mines and their "affinities," and a few passing words on some very interesting politico-commercial delusions. To "One and All," a happy New Year.—*Jan. 5.*

CHEOPS.

A PRACTICAL DIRECTOR.—The advantage of having a practical man upon the direction of a public company has been fully proved by the results which have been obtained by the Iron Steam Boat Company, whose vessels navigate the Thames above London Bridge. In consequence of repeated informations and fines for non-compliance with the Act for the prevention of smoke nuisance, Mr. Stratton, one of the directors, turned his attention to the subject of smoke prevention, and after many experiments succeeded most effectually. The fire-door is almost as simple as a door of the ordinary construction, and yet the issue of smoke from the funnel is entirely prevented. It has apertures which are opened and closed by a sliding plate, which is so arranged, by the use of a T lever, that the door cannot be opened without the contrivance being thrown into a proper position for use. Behind this door there is a series of plates, with apertures and deflectors, of an extremely simple character, their being formed by cutting three sides of a square and bending the piece thus left, back. The result of the application to the company's boats has been that informations have entirely ceased. It must not, however, be supposed that marine engines are the only description to which the invention is applicable, as it has been adopted by several sugar bakers and other manufacturers, and for heating an ordinary baker's oven, and in each case has given complete satisfaction; in its application to the oven its success was at once apparent, the oven being heated better and in less time than usual, and with a marked economy of fuel. In July last, when the question of extending the Smoke Act to Scotland was under discussion, some experiments made on the *Wedding Ring* were witnessed by the Marquis of Stafford, — Smollet, M.P., E. Crawford, M.P., R. Daglish, M.P., and several other scientific gentlemen, and considered by them perfectly successful, although various descriptions of bituminous coal were used. The experiments were made during a run of five miles, with a view not only to see how soon the smoke could be stopped by applying the apparatus, but also to ascertain whether the application in any way interfered with the generation of steam, or affected the speed of the vessel, and in both respects the result was declared satisfactory; and the inventor, who was on board, was complimented on the simplicity and efficacy of his invention.

WEEKLY LIST OF NEW PATENTS.

GRANTS OF PROVISIONAL PROTECTION FOR SIX MONTHS.—R. OXLAND, Plymouth: Manufacture of alloys or compounds containing metallic tungsten.—J. M. J. DEGABRIEL: Signalling to prevent collisions between trains upon railways.—R. RENNIE, Netherwood: Self-acting trap doors for mines.—J. TAYLOW, H. HODKINSON, Wirksworth: Railway breaks, and in apparatuses for connecting shafts or rods for working breaks and signals.—W. BASFORD, Lowther Cottages, Islington: Manufacture of gas, and in retorts and other apparatus to be used therein.—S. and DANIEL RODGETT, Blackburn: Coupling and uncoupling railway, tramway, and other carriages, wagons, lorries, trucks, and other vehicles.

VENTILATION.—Mr. John Rankin, of Manchester, provisionally specified an improvement in ventilating rooms, &c., which consists in using a series of valves in the glass forming the upper part of the window, as in Moore's patent; the arrangement for opening the ventilator is such that the apparatus may be put by a person far from the said window.

FURNACES.—Mr. Fontaine-Moreau has patented an invention which consists in constructing furnaces of steam-boilers with a peculiar arrangement of valves, levels, flues, or pipes, so that the smoke is returned to the furnace to be consumed.

ROLLING IRON AND STEEL.—Mr. Wm. Hale, of Swan-walk, Chelsea, has patented the arranging of rollers placed each pair across, or at an angle of the preceding. The grain of the steel will be by this means twisted or crossed more effectually than by previous modes. The second part of his invention consists in employing two rollers of different size, whereby the grain is more lapped and interwoven, and there will be greater toughness.

WATER GAUGES.—To indicate the height of water in steam-engines, Mr. James Sutcliff, of Manchester, proposes to make a box (with a glass front) of any convenient size or shape, in any position at the water level. He provides a valve between the box and boiler, which may be opened and closed at pleasure by the fireman or person in attendance. The box acts precisely in the same way as an ordinary gauge glass, but as the valve can be closed, the glass in the front of the box can be easily replaced by a new one if broken.

RAILWAYS.—Mr. N. Cox, Liverpool, to obtain a firmer grip employs a corrugated rail between the ordinary wheels, and uses the same the whole length of the line, or for ascending inclines only.

STEAM-ENGINES.—Mr. W. Ellis, Vulcan Foundry, Warrington, has patented the introduction of ports in the slide valve, whereby the emission of steam is regulated. The ports are placed inside the valve, and are furnished with apparatus for opening and closing them.

ANTI-FRICTION PISTON.—Mr. Wm. Robertson, Glasgow, proposes an improved method of preventing friction between the cylinder and piston of steam-engines, and especially horizontal ones. Part of the periphery of the piston is cut away, and a small chamber introduced, which communicates direct with the steam in the boiler, by the use of a pipe sliding in a socket.

CASTINGS.—Mr. P. M. Parsons, of Duke-street, Adelphi, constructs moulding boxes, patterns, and apparatus in connection with them, so that the mould formed by ramming the sand is delivered by turning the mould or box.

INDICATORS.—Mr. T. T. Jopling, Sunderland, has invented an improved mode of ascertaining the height of water in steam-boilers. He provides a float of the ordinary description, but the rod, instead of working in the stuffing-box as usual, rises and falls within a glass tube, in which there is the same pressure of steam as in the boiler; the float consequently works freely, and the height of the water can be readily seen.

SIGNAL LAMPS.—Mr. W. Hart, Brigg, Lincolnshire, has invented an improved description of signal lamps, which consists in the use of levers operated at the side of the lamp. When the levers are out of use a plain white light is exhibited, but upon the button on the outside being moved into a second notch a green glass is drawn in guides behind the lens; on the button being removed to the extremity of the slot, the ruby glass is brought behind the lens. The principal object of the invention is to provide an improved railway hand-signal lamp, but it may be applied to stationary signals with equal success.

IMPROVEMENTS IN FIRE-ARMS AND PROJECTILES.—Mr. Genhart, Liege, Belgium, has just specified his patent for fire-arms, rifling the same, and projectiles, which he states consists—firstly, in a gun which may be loaded at the breech or at the muzzle, and offering in either case the same strength and security as any well made gun intended to be loaded only at the muzzle. This security is obtained by means of a screw-plug of peculiar construction, which, with its action, are hereinafter more fully described. Double as well as single barrelled guns can be constructed on this principle. The locks of such guns are of the ordinary kind, and any description of charge, in the form of cartridges or loose powder and shot or ball, may be used with such guns. By substituting for the common nipple a small slit in the barrel, the description of cartridge known as the Lefaucheux cartridge may be used. When this gun is to be loaded at the breech, it is first cocked upon drawing a lever from left to right. A screw breech plug is withdrawn from the barrel, and retreats into the breech end. The barrel turns downwards by its own weight (or may be assisted by a spring placed under it) on the hinge until the breech is sufficiently exposed to admit the charge; the barrel is then raised, the lever attached to breech-plug is drawn from right to left, which motion causes the screw-plug to advance into the barrel, instantaneously uniting it and the breech end of the gun as firmly as if they were a solid piece of one metal. Cock the gun and put on the cap, taking care whilst so doing to press down the barrel, to ensure its being perfectly horizontal. To load the gun at the muzzle, leave the lever in its normal position—in a direct line with the barrel. The gun may then be treated in all respects as an ordinary fowling-piece, musket, or rifle. The screw-plug is moved by the small toothed wheel fixed on a centre pin, acted upon by the larger toothed wheel, which forms part of the lever, and is commanded by it as above described. The toothed wheel, which turns on an axis in the breech end, gives motion to one or more smaller wheels, according to the number of barrels. The thread of the sided screw breech-plug is so arranged that the short motion given to the lever causes the screw to project at once the required distance into the barrel. The above-described arrangements may be adapted to pistols by reducing the size of the parts and changing the gun-stock into a pistol handle, when it may form a revolver pistol, by increasing the number of barrels, and small wheels and screws to be the same in number. This invention consists—secondly, in rifling fire-arms, and in the projectiles to be employed with the fire-arm. I rifle, or give rifle effect to, the barrels of guns formed as before described, or otherwise, by subjecting the outside of such barrels, for a foot or thereabouts, to the pressure of one or more suitably shaped rollers, so as to cause a groove to be made in the outside of the gun, giving a longitudinal partially spiral ridge protruding in the inside of the barrel, giving rifle effect to the barrel. It will be evident that this mode of rifling is just the reverse of the ordinary mode, whereby the substance of the barrel is cut away from the inside to produce a rifle groove, and, therefore, ordinary rifle expansion projectiles are not necessary for these rifles, although they might be used; but I prefer to adopt a solid projectile or bullet, as a gun thus rifled admits of a long projectile, about double the size and weight of the ordinary projectile, which projectile may be inserted into the end of a cartridge, which is to be loaded at the breech end of the barrel, without opening the cartridge envelope, and the lateral fire will go through the envelope and ignite the powder.

STEAM SUPERSEDED.—MM. Bourget and Burdin, referring to the mathematical theory of engines worked with heated air instead of steam, remark that, while with regard to the theory of the steam-engine many problems remain unsolved, there is not one in the theory of heated air but is solved by their treatise. With such a treatise extant we may confidently look forward to vast improvements in engines generally.

ELECTRO-MAGNETISM AS A MOTIVE POWER.—The letter from Mr. Joule, in the *Times*, to which we referred in our last has, been followed by another from Mr. Donkin, who states that there is one important point, that may involve the practical solution of the problem, not alluded to. He says, a piece of zinc and a quantity of sulphuric acid sufficient to convert it into sulphate of zinc, represent a store of mechanical work. If the combination be allowed to take place, an amount of work will be given out, in one form or another, which we can neither diminish nor increase. When the process goes on in that particular arrangement called a galvanic battery a portion of this work is given out in the form of heat; but if the battery be made to work an electro-magnetic engine the heat is more or less completely converted into mechanical effect, as Mr. Joule states. Now, the point not noticed by Mr. Joule is this:—The whole of this heat, or mechanical effect, is not equivalent to the store of work laid up in the zinc and acid before their combination. To account for what becomes of the rest, we must consider what goes on at the so-called negative plate of the battery. Here we have a process of the opposite kind to that which takes place at the positive, or zinc end. The solution of the zinc is a spending process, and corresponds to lowering a weight or taking from a store. But at the other end there goes on a raising process—a laying in store; and it is only the difference between these two which appears in the form of heat or mechanical effect. The particular form in which work is laid in store at the negative end depends upon the particular battery. The most striking instance may be seen in Daniell's. In this battery zinc is converted into sulphate of zinc at the positive end, and copper is extracted from sulphate of copper at the negative; the former is a lowering process, the latter a raising process; the difference is the available working power of the battery. The important economical question, however, is whether the work laid in store at the negative end be utilised, so as to make the whole operation practically remunerative? In Daniell's battery we get metallic copper: theoretically, this is a more valuable substance than sulphate of copper, because the extraction of the former from the latter requires work, or its equivalent; but, practically, sulphate of copper costs more than the quantity of metallic copper which it will yield (he believes that 4s. worth of sulphate contains about 3s. worth of metallic copper). In the common battery, such as Smee's, hydrogen is given off, and allowed to escape; although it represents a store, for it may be burnt. In Grove's battery the hydrogen is lost (he says, "If it should be held that the raising process at the platinum plate is not the separation of hydrogen, but the conversion of nitric acid into nitrous acid, it would not affect the argument,") by being dissolved in the nitric acid. From these facts he concludes that the aim of inventors should be the contrivance of a battery in which the work laid up at the negative end should be laid up in an available form, as it actually is in Daniell's battery, and in a profitable form, as it actually is not in any existing battery.

The return of the Bank of England for the week ending Wednesday, Jan. 6, compared with the previous weekly return, shows the following results:—

Circulation issue	£26,587,925	Increase	£1,207,370
Circulation active	19,499,005	,,	183,435
Public deposits	7,190,661	Decrease	252,952
Other deposits	14,845,877	,,	227,094
Government securities in banking department	7,765,309	Increase	223,818
Other securities in banking department	25,661,066	Decrease	1,638,749
Coin and bullion in both departments	12,643,193	Increase	1,188,232
Seven day and other bills	850,020	,,	22,615
The Rest	3,606,005	,,	47,297
Notes in reserve	7,088,920	,,	1,023,935
Total reserve (notes and coin), banking depart.	7,619,188	,,	1,004,797

This return is extraordinarily favourable, and points to a still lower rate of interest as soon as the Bank shall have satisfied the dividend claimants. Including the sums bought since Wednesday, the Bank now hold fully twelve millions and three-quarters of bullion; but some quantity of coin will be temporarily withdrawn through the payment of the dividends, which commenced this day. The increase in the reserve is also more than a million, the great decrease in the "other securities" having far more than counterbalanced the decrease in the deposits. The decline in the Treasury deposits is caused by the quarterly payment of official salaries, &c. The increase of 223,818*l.* in the Government securities must be attributed to purchases in the market.

RAILWAY TRAFFIC.—The Traffic Returns of the Railways in the United Kingdom for the week ending Jan. 2, amounted to 392,507*l.*, and for the corresponding week of 1857 to 403,074*l.*, showing an decrease of 10,567*l.* The gross receipts of the eight railways having their termini in the metropolis amounted for the week ending as above to 167,107*l.*; and for the corresponding week of last year to 165,998*l.*, showing a increase of 1109*l.*

The increase on the Eastern Counties amounted to 1602*l.*; on the Great Northern to 2687*l.*; on the Great Western to 406*l.*; on the London and Blackwall to 111*l.*; on the London, Brighton, and South Coast to 1232*l.*; on the London and South-Western to 743*l.*; and on the South-Eastern to 190*l.*; together, 6973*l.*: but from this must be deducted 5863*l.*, the decrease on the London and North-Western; leaving the increase as above, 1109*l.*

The receipts on the other lines in the United Kingdom amounted to 223,399*l.*, and for the corresponding period of 1857 to 237,076*l.*, showing a decrease of 11,677*l.* In the receipts of those lines, from which must be deducted the increase on the metropolitan lines, leaving the total decrease 10,567*l.* as compared with corresponding week of 1857.

LONDON TRAMWAY.—The estimated expense by Mr. J. Samuel, the engineer of this undertaking, including contingencies, is reported to Parliament to amount to 31,000*l.*

The BOMBAY, BARODA, AND CENTRAL INDIA RAILWAY COMPANY have announced that the Hon. East India Company have intimated their approval of an increase of the capital to the extent of 1,000,000*l.*, with a guaranteed interest at the rate of 25 per cent. per annum upon such additional capital, on condition that a fourth part is paid into the company's treasury on or before March 18 next. The directors now offer the shares to every shareholder registered on January 15 next, in the proportion of four shares to every three, conditionally upon the shareholders signing the Deed of Accession, and those residing in England paying 4*l.* 10*s.* per share before March 16; and those in India, 4*l.* 10*s.* per share, at an exchange of 1*s.* 10*d.* per rupee, on or before April 29 next. The parties accepting such new shares have the option of paying in anticipation to the extent of 13*l.* 10*s.* per share, which will entitle them to interest at the rate of 5 per cent. per annum, from the East India Company, from the date of payment. The East India Company have granted to the railway company the concession of the 183 miles from Surat to Bombay, by which the railway will extend from Ahmedabad, passing through a district known as the garden of Western India; and as Bombay is the mart from which the Chinese empire chiefly derives its supply of cotton, the importance of the junction of Surat and the cotton-growing districts will be duly estimated. A considerable portion of the earthworks are in a very forward state; but, in the construction of railways in our Indian possessions, it is necessary that two years should elapse before the permanent way can be laid down, to prove that they can stand the test of the monsoons. The present roads in India are quite in a primitive state, and, from the rough manner the cotton is now conveyed to Bombay, considerable damage is done by mud and dust. The East India Company, for some reason, never in the first instance guarantee a sufficient sum, and, therefore, the proposed increase is not unexpected, as from the formation of the company it has always been announced that the line could not be completed for the original capital—500,000*l.*, so that there is little doubt but the whole of the new shares will be taken up by the existing holders.

The greatest activity is being displayed in the construction of the branch of the Genova Railway which is to unite it with the Victor-Emmanuel line. The four tunnels have been commenced; that of St. Innocent will be 160 metres; that of Colambiere, 1300; Brison, 600; and the Grand Rocher, 240 long. The earthworks between these different tunnels are almost terminated.

Several thousand additional men are about to be employed on the works of the Northern Railway of Spain. The Government has decided that the terminus of the Northern Railway shall be established at Madrid, near the San Vincente Gate. The Spanish Credit Mobilier Company, in Catalonia, is authorised to make a survey of a tram-road, to be worked by horses, in order to unite Calzas de Mombuy to the railway from Barcelona to Granollers.

The Turin journals announce that the cutting through of Mount Cenis has commenced, and that about 20 yards have already been excavated. The system employed thus far has been the ordinary one of blasting, but the great machine specially constructed for boring through the mountain will soon be brought into use, and the cuttings for facilitating access at each end are completed.

WELSH POTOSI, AND LIMITED LIABILITY.—On Thursday, Mr. Commissioner Fane made a peremptory order for call against Messrs. J. and A. Stansfield, who claimed exemption on the ground of fraud, alleging that their case came precisely within the meaning of the rule established by the celebrated case of Brockwell. The Commissioner observed that the contributory had his remedy against the company if he could prove fraud.

MEXICAN AND SOUTH AMERICAN COMPANY.—Yesterday a meeting of the creditors was held at Rolls Chambers, attended by Mr. Harding, the official manager, and his solicitors, Messrs. Amory, Smith, and De Metz, when Mr. Hyde Clarke was appointed creditors' representative under the newly-passed Act of Parliament.

Mr. GEORGE HENWOOD has been commissioned to examine and report on the East Providence Mines. A severe illness, from a cold caught underground at Wheal Ninnis, has prevented his usual parcel coming to hand. He purposes returning to town immediately after this inspection, when he may be consulted on a vast number of mines he has thoroughly examined during his lengthened visit, including nearly every mine in the western part of Cornwall.

The Nouveau Monde Mining Company have called a meeting, to be held in Paris on Tuesday next, when it is expected, from want of additional capital, that they will be compelled to wind-up.

PRINTING INK.—Mr. C. Fleet, Brighton, has painted a new description of printing ink, which is unaltered by the action of air, light, or sulphurous vapours, and insoluble in nitric, hydrochloric, or other acids, or in caustic alkalies, being only soluble in boiling oil of vitroil. It is considered very valuable for printing bank notes, bills, and similar instruments, as it cannot be effaced without destroying the appearance of the note or other document. The material employed in the manufacture of the ink is the calcined green oxide of chromium (instead of, or combined with lamp, or ivory, black), which is mixed with oil or varnish, or the ordinary ingredients of printing ink, according to the purpose for which it is to be used.

THE PATENT LAW, AS RECENTLY AMENDED.—No. VII.

BY P. W. CAMPIN.

PATENTS OF CONFIRMATION.—The rapid progress of the industrial arts has made it often very difficult to say whether a thing supposed to be new and never before used, is really new and has not been ever before used; indeed, absolute novelty is now never contended for, as being too difficult and impracticable a thing to attain to, but the novelty still required by law is as much as could possibly be obtained, and even this standard is very difficult to come up to, and this being the case, the law (as hath been stated under the head of Novelty) allows the patentee who may find out that such invention has been heretofore in a slight degree published or used, or both, to petition Her Majesty in Council to confirm and make good the patent, notwithstanding such publication or use, provided that the prior use be of the character before stated, as susceptible of forming the basis of a confirmation patent when treating of "novelty." There is no doubt that this provision of the law is a wise one, but it is to be regretted that in practice it is of little advantage to patentees, seeing that the Judicial Committee of the Privy Council, to whom these matters are referred, take so narrow a view of the matter, that they scarcely do more than relieve patentees from defects that even the common law would pass over. Thus, in Baron Heurteloup's case, they agreed to confirm a patent where a part of the invention had been previously published by a French book in the British Museum, which probably, considering the chaotic state of that vast collection, had never been seen but by the librarian, and the party who specially searched for some work which should militate against the patent right. The other cases, as Westrupp's, Lamenaude's, Stead's, &c., show that the Privy Council will not render their power of any practical use if they can avoid it. Now all who understand anything of the patent question begin to feel that on this point a law similar to that in Austria is the only sound one—that he who re-introduces old and useful ideas not in use at the time of granting the patent, shall have his rights upheld, at all events, for a time; and seeing that the number of patented inventions is increasing vastly, it follows that the danger of an invention not being novel is becoming every day more and more imminent; and, therefore, if the patent law is to foster the practical realisation of useful improvements for the public benefit, it must protect the patentees of useful revived inventions, whether they have been previously in use, or the subject of publication (except, perhaps, when published in a readily accessible public record); provided, of course, that the invention is not in use at the date of the patent, nor has been used for a few years prior to that date. Indeed, the Statute of Monopolies speaks of patents being allowed to be granted for new inventions "which others at the time of making the grant of letters patent shall not use;" thus appearing to make the test of novelty the question, whether the thing patented was or was not in use at and up to the date of the letters patent. Letters patent of confirmation pass through the Commissioners' or Great Seal Patent Office, being sealed upon the presentation of Her Majesty's Order in Council thereat.—(See Act of 1852.)—*Patent Office, Strand.*

DARTMOOR.—No. I.

Impressed with the capabilities of this neglected yet important district, we drew public attention to it by publishing several articles upon the subject, some eight or nine years since. Our principal object was to point out this great tract of land as a fitting place for the establishment of a penal settlement for a portion of the convicted criminals of Great Britain, and making it a self-supporting system, whereby the expenditure attendant on transportation to our distant colonies would be considerably lessened, as well as remove the injustice which was then inflicted upon the freedom, industry, and morals of the self-emigrating colonists.

Considering at the time that some objection would be raised by the Government at the expense which would necessarily follow the erection of a suitable prison for the confinement of the unhappy violators of the laws of our land and society, we directed especial notice to the prison already there, which was commenced in 1806 (and finished at a cost of 127,000*l.*), for prisoners taken in the wars with our foreign enemies, and capable of containing 10,000 persons, but in consequence of the want of occupation during the long peace which followed the last French war, had been suffered to fall into a dilapidated state.

It appears that previous to the year 1820 it was spoken of as being used as a prison for convicts for the purpose of improving the moor; and in the above year a school of industry was projected, when Mr. Brougham (the present Lord Brougham) stated at a public meeting held in London that his Majesty (George IV.) desired to give a donation of 1000*l.*, and to grant a portion of the waste, towards the object, but only one of those measures was attempted to be carried out 33 years afterwards.

In rendering it a self-supporting establishment, our views were to classify the convicts according to the occupations they may have previously followed before their incarceration, so that employment should be given to all the unfortunate inmates agreeing with their callings or capabilities. The agricultural labourers we would employ in the pursuits of farming, and the cultivation of wheat, barley, oats, turnips, potatoes, &c., the growth of flax, planting of trees—such as Scotch firs, ash, birch, and others capable of standing an exposed position; the rearing and feeding of cattle, sheep, pigs, &c., for which the soil is admirably adapted. Whilst quarrymen and general labourers could be engaged in raising and preparing granite for Government buildings or other national undertakings, the resources of which are unlimited and the quality unexceptionable. Carpenters, smiths, and other mechanics should be employed in the buildings and such necessary work that may be required of them; shoemakers and tailors in making shoes and clothes for the prisoners; and those of less physical powers could be employed in the numerous duties an establishment of this kind requires, and, unhappily, a number of such are to be found among the metropolitan and great provincial towns criminals. Fuel, consisting of peat, can be procured to any extent throughout the whole forest.

Soon after we published those remarks Government commenced repairing the dilapidated prison of Dartmoor, and made it the receptacle for convicts; but whether the resolution to adopt the system arose exclusively from our intimations we are not in a position to state, for Governments are not generally too hasty in acknowledging private benefactors; and until we have been otherwise advised we shall consider that the establishment of Dartmoor Prison for convicts originated with us, and that it was upon our suggestions the then Government acted.

Within the past few weeks we learn that H.R.H. the Prince of Wales (who is the lord of the manor) has given instructions to plant a large portion of the forest. Although the word forest conveys to our imagination a vast space of land covered with noble trees, yet in this wild and desolate spot scarce a sapling can be found, if we except the plantations of fir, &c., planted by the late Sir Thos. Tyrwhitt, who having the meretorious desire of planting and experimenting on the soil and climate of the moor, obtained a grant of land, where he built Tor Royal, and planted extensively, which are now in a thriving and luxuriant condition. He also strenuously assisted in promoting and establishing a railroad from the Moor to the port of Plymouth, which now lays dormant. Those may be considered the only signs of civilisation in this land of desolation. Yet we hope that as great if not a more memorable monument of civilisation will be found in the Dartmoor Convict Prison, when the laudable and philanthropic object shall have been achieved—that of reclaiming and returning to society men who have been banished from its circle for the heinousness of their crimes and the transgression of the laws.

In 1852 we paid a brief visit to the prison, and saw a large number of convicts employed in the various occupations allotted them, both in the prison and on the grounds surrounding; but, owing to the absence of the governor and the shortness of our time, we could not enter into the details of the system pursued, although to a casual visitor every portion of the machinery appeared to be working in the most satisfactory manner. We were shown a sample of flax grown the year before, which was the first of its cultivation, and considered by those conversant with its character to be of an excellent quality. We take this opportunity of publicly thanking the deputy-governor and other officials for the urbanity and kindness shown us and our friends upon that occasion.

As our chief object in returning to Dartmoor upon the present occasion is not to treat of its surface, but rather to that which is more in accordance with our own immediate associations—as the organ of a great commercial interest—the geology and mineralogy of Dartmoor, which we purpose resuming in our next Journal.

In the Court of Vice-Warden of the Stannaries.—Stannaries of Cornwall.

PURSUANT to TWO several ORDERS, or DECREES, made in the Causes of— PARMER AND OTHERS v. HODGE; and STEPHENS AND ANOTHER v. SAME.

The CREDITORS in respect of NORTH WREY AND JULIA MINE, in the parish of St. Ive, within the said Stannaries, are, on or before the 20th day of January inst., to COME IN and PROVE THEIR DEBTS before the Registrar of the said Court, at his office in Truro, or in default thereof they will be excluded the benefit of the said two several decrees.

Dated Registrar's Office, Truro, the 6th day of January, 1858.

In the Court of Vice-Warden of the Stannaries.—Stannaries of Devon.

In the Cause of NICHOLLS AND OTHERS v. HORSWELL.

NOTICE IS HEREBY GIVEN, that, pursuant to an ORDER, or DECREE, made in the above-mentioned Cause, and bearing date the 6th day of November last, a PUBLIC AUCTION will be HOLDEN at WHEAL LOPES, in the parish of Bickleigh, within the said Stannaries, on Wednesday, the 20th day of January inst., at Eleven o'clock in the forenoon, for SELLING, either together or in lots, the MINING MACHINERY, MATERIALS, and OTHER EFFECTS, at or upon the said mine, and belonging thereto, or to the adventurers therein in respect thereof.—For viewing the same, application may be made to the officer in possession on the mine; and for further particulars, to Messrs. EDMONDS and SONS, plaintiffs' solicitors, Plymouth; or to Mr. H. S. STOKES, solicitor, Truro.

Dated Registrar's Office, Truro, Jan. 4, 1858.

In the Court of Chancery, Ireland.

In the Matter of the JOINT-STOCK COMPANIES WINDING-UP ACTS, 1848 and 1849, and of the MIZEN HEAD COPPER MINING COMPANY.

PURSUANT to my ORDER made in this Matter, bearing date the 15th day of May, 1857, I, the MASTER charged with the winding-up of this company, will, on Wednesday, the 3d day of February, 1858, at the hour of One o'clock in the afternoon, at my Chambers, Inns' Quay, in the City of Dublin, SET UP AND SELL to the highest and fairest bidder, ALL that and those the MINES called the MIZEN HEAD COPPER MINES, situate in the barony of West Carbery and county of Cork, in the petition in this matter mentioned.

Dated this 21st day of November, 1857. WILLIAM BROOKE.

DESCRIPTIVE PARTICULARS.—The Mizen Head Copper Mines are held under lease, bearing date the 22d day of February, 1853, for a term of 31 years, from the 1st of November, 1852, subject to the royalty of 1-18th of the clear profits thereof, and are situate in the extreme south-west of Ireland, about sixteen miles from the town of Skull, and seven from the safe harbour of Crookhaven. Considerable sums of money have been expended in sinking shafts, machinery, &c.; but the mines, which, from the report of competent judges, are considered very eligible, have been but partially and inefficiently worked.

For further particulars, rentals, and conditions of sale, apply to AQUILLA SMITH, Esq., the official manager, 121, Lower Baggot-street; EDWARD JOHN BOLTON, his solicitor, having carriage of sale, 67, Stephen's-green South; MURDOCK GREEN and Co., solicitors for contributories, 52, Lower Sackville-street; MICHAEL LARKIN, solicitor for petitioner, 1, Merchants' Quay; TIMOTHY M'CARTHY DOWNING, solicitor, Skibbereen, and 7, Inns' Quay; and to MICHAEL JOHN GEOGHEGAN, solicitor, 50, Lincoln's Inn-fields, London.

IMPORTANT TIN MINE IN ST. JUST, PENWITH, CORNWALL, FOR SALE.

MR. BELLRINGER WILL SELL, BY AUCTION, on Monday, the 18th day of January next, at Three o'clock in the afternoon, at the Three Tuns Hotel, Penzance, in One Lot, on such conditions as shall be then produced, the SETTS of BALLESWIDDEN MINE, in St. Just, with the DRAFT ENGINE, 45 in. cylinder, with two boilers; STEAM STAMPS, of 38 in. cylinder, with two boilers; THREE STEAM WHIMS, with four boilers; and OTHER MACHINERY, ERECTIONS, and PLANT, of every description, as the mine stands, in full operation and working order.

Leave to view the mine, and inspect the setts, may be obtained at the offices of Mr. R. V. DAVY, the purser, East-street, Penzance; and all other particulars of the auctioneer, and Messrs. MILLETT and BORLASE, solicitors, Penzance.

Dated Dec. 28, 1857.

SOUTH WALES.
VALUABLE FREEHOLD ESTATE AND MINERAL PROPERTY.

Seven miles from the Port of Britton Ferry, and within 400 yards of the South Wales Mineral Railway.

MESSRS. RUSHWORTH AND JARVIS WILL SELL, BY AUCTION, at the Mart, on Friday, the 29th January, at Twelve, a valuable FREEHOLD ESTATE, called FFORCH LAES, in the parish of Glyncorwg, in the county of Glamorgan, consisting of a capital FARM-HOUSE, with homestead and two labourers' cottages, and 229 acres of cultivated land, together with its very valuable MINERAL PROPERTIES, which include the celebrated CWM RHONDDA, the most noted bituminous coal for coking and household use to be found in the valleys of South Wales, and into which there is already a level opened; also, the coal known as the MERTHYR and ABERDARE STEAM COAL; likewise a QUARRY of excellent PAVING and OTHER STONE, already opened, and yielding a good yearly profit. The estate altogether, as a landed and mineral property, offers a safe and profitable investment.—Printed particulars, with a plan, may be had 14 days prior to the sale, at the principal inns at Bristol, Birmingham, and Liverpool; of Messrs. RUSHWORTH and JARVIS, land surveyors and auctioneers, Saville-row, Regent-street, and No. 19, Change-alley, Cornhill, London; of Mr. R. LEWIS, the tenant, on the premises, who will show the property; and of Mr. H. J. HOLLIER, solicitor, Aberdare, Glamorganah.

SOUTH WALES.—Mr. ARTHUR O. DAVIES, of Dowlais, is authorised to TREAT for the SALE of TWO VERY VALUABLE GOING COLLIERIES in South Wales.

Also, TO LET, an EXTENSIVE TRACT of STEAM COAL, on a long lease, at a moderate royalty, with a railway running through the property.

For terms, apply as above.

VALUABLE COLLIERIES AND COLLIERY PLANT, AT WATNALL AND GREASLEY, NOTTINGHAMSHIRE, FOR SALE BY PRIVATE CONTRACT.—TO BE SOLD, BY PRIVATE CONTRACT, by order of the Assignees, under a Deed of Assignment, the UNEXPIRED TERMS of YEARS in ALL those COLLIERIES, situate at Watnall and Greasley, in the county of Nottingham, lately worked by Mr. James Morley, with the STEAM-ENGINES, RAILS, IMPLEMENTS, MACHINERY, GEARING, and PLANT, therein and thereon, including a PRIVATE RAILROAD to the Nottingham Canal; inventories of which may be inspected at the collieries, and at the office of Mr. HUNT, solicitor, Weekday Cross, Nottingham.

An excess, estimated at £3000, in respect of minimum rent, has been paid to one of the lessors, of which excess the purchaser will have the benefit.

Approved security will be taken for payment of the purchase-money by instalments.

The terms of the leases and contracts under which the collieries are held may be known, and any further particulars obtained, on application at the offices of Mr. HUNT, of Messrs. W. and R. ENFIELD, solicitors, Nottingham; or of Mr. F. BAKER, solicitor, Corn Market, Derby.

IRONSTONE AND COAL, CARMARTHENSHIRE.—TO BE LET, the numerous VEINS of excellent IRONSTONE and the COALS in the FARMS of CWM HIDER, CWM-GRWGYLLO, and PEN-Y-GRAIG, situate near Pontyberem, in the Gwendreath Valley, and consisting of about 160 acres. The whole of these veins are on the north crop of the lowest measures of this coal basin, and are well known to produce the best ironstone in South Wales.—For particulars, apply to Mr. JOSHUA RICHARDSON, C.E., Neath.

TO CAPITALISTS, &c.—TO BE LET, the WINGFIELD COLLIERY. This colliery is situate on the North Midland Railway, close to the main line, with which it communicates by a siding. The works are in full ready working order, and capable of producing a large daily yield. Since its opening a very large trade has been effected in the London and adjacent markets. Every colliery requisite will be found on the plant, and all possible accommodation and facility will be afforded to any respectable party wishing to enter the coal trade.—Application to be made to Mr. THOS. GOODWIN, mineral agent, Codnor, Derbyshire.

ENGINEERS' TOOLS TO BE SOLD.—A LARGE STOCK of NEW and SECOND-HAND SLIDE and SCREW-CUTTING LATHES, from 6 to 24 in. centres, and from 4 to 24 ft. long; PLANING MACHINES, self-acting in the vertical, angular, and horizontal cuts, from 4 to 24 ft. long; SINGLE and DOUBLE GEARED DRILLING MACHINES; SHAPING MACHINES of the newest improvements; also, SCREWING, SLOTTING, SHEARING, and PUNCHING MACHINES, and all kinds of ENGINEERS' TOOLS, either in stock, or made to order.—Tracings of the above will be sent, and the tools may be seen, on application to Messrs. HENRY ASHWORTH and SONS, Exchange-square, Lincoln-street, Nottingham.

THE NEW MIDLAND MINING COMPANY (LIMITED).

In 2000 shares of £1 each.

A deposit of 2s. 6d. per share must accompany each application.

The above company have purchased the mine and valuable plant at Ashover, late the property of the Old Midland Mining Company, on very favourable terms, and they propose to raise the necessary capital for working the same by the issue of shares, as above.

The company's prospects are exceedingly favourable and encouraging, and they have little doubt of ultimate success. They point with confidence to the annexed report of Mr. Boden, the late manager of the mine, who has taken a large interest in the new undertaking. It is as follows:—

GENTLEMEN,—In my last report to the late company of the Midland Mine, Ashover, I stated what had been done, and what ought to be done, which I now repeat. The abrupt manner in which that company terminated (which was in consequence of the capital being expended) left the mine in a very unsatisfactory state, and quite unproved. The shaft is 38 fms., the last 12 of which were sunk without driving to the vein, except at the toadstone. In the majority of instances, the vein is worthless down at the toadstone, although it is a good vein a few fathoms above. The vein ought to be found at the Little clay, at the top of the white stone, for I am confident the best carriage in the white stone will be found at that place. This is about 9 fms. from the toadstone, and would not cost more than £10 in driving; at the same time, the east end should be cut forward, to intersect the veins that are known to be crossing on the south side. The junction of these veins with the Midland has never been proved in any age, being too low for the old man to reach with his means of lifting water, the measures having over-dipped him before reaching that point; consequently, there is a two-fold advantage in driving the east end, for you will meet the measures in which the old man's best works have been, or the measures next the shale, and cross the veins from the south side at the same time. This being done, it is a moral certainty that the vein will be immensely rich; the last price for driving the east end was £5 15s. per fm., the shareholder taking the ore. I can now get it done for £5 per fm., and I believe there is £5 worth of ore in every fathom. You will now have about 30 fms. of stopes before you, all laid dry, with the pump shaft sunk to the toadstone. The pumps and engines are in a most efficient state, and I have no hesitation in saying that one engine and one engine tenter, pumping twelve hours per day, will keep the water below the level of the east end. From my personal knowledge and practical experience of the mine and district, I believe your property to be valuable. JOHN BODEN, Mineral Agent.

Application for shares and other information to be made to Mr. JAMES BUNTING, secretary pro tem., Beetwell-street, Chesterfield; or to Mr. E. B. PALMER, Mineral Record Office, Chesterfield.—Chesterfield, Jan. 7, 1858.

WHEAL UNY.—Notice is hereby given, that the NEXT QUARTERLY MEETING of the adventurers will be HELD at No. 44, Moorgate-street, London, on Tuesday, the 19th day of January inst. The chair will be taken at One o'clock precisely. JAMES HUTT, Sec.

44, Moorgate-street, Jan. 9, 1858.

CONSOLIDATED COPPER MINES OF COBRE.—Notice is hereby given, that a HALF-YEARLY GENERAL MEETING of the proprietors of this association will be HELD, in conformity with the Deed of Settlement, at the offices of the company, Gresham House, Old Broad-street, on Tuesday, the 26th day of January inst., at One o'clock precisely.

On that day two directors (Charles William Grenfell, Esq., M.P., and Robert Passenger, Esq.) and one auditor (Alexander Druce, Esq.) will go out of office by rotation, agreeably to the Deed of Settlement, but are immediately eligible, and are candidates for re-election.

It is necessary that persons intending to offer themselves as candidates for the direction or auditorship should leave notice of such their intention, at the offices of the company, at least 14 days before the day of election, and exclusive thereof.

WALTER SHAIRP,
GEO. WHITMORE, } Directors of the Company.

Gresham House, Old Broad-street, Jan. 5, 1858.

UNITED MEXICAN MINING ASSOCIATION.—Notice is hereby given, that the HALF-YEARLY GENERAL MEETING of proprietors of this association will be HELD at the office of the company, 5, Finsbury-circus, on Wednesday, the 27th day of January inst., at One o'clock precisely.

The Transfer-books will be closed on the evening of the 19th, and re-opened on the 28th inst. By order of the Directors,

5, Finsbury-circus, London, Jan. 4, 1858. ARTHUR WESTMACOTT, Sec.

THE LONDON AND VIRGINIA GOLD AND COPPER MINING COMPANY.—Notice is hereby given, that the undermentioned SHARES in this company, which have been forfeited under the provisions of the bye-laws, WILL BE SOLD, BY AUCTION, by Mr. THOMAS JOHNSON, at the City Auction Rooms, 39, Gracechurch-street, London, on Monday, the 18th day of January next, at Two o'clock in the afternoon.

By order of the Board of Directors,
JOHN ANDERSON, Sec. and Cashier.

34, Lime-street, E.C., London, Dec. 10, 1857.

Numbers of the shares above referred to:—

20,731	to	20,800,	7,841	to	7,915,	11,031	to	11,180,	19,161	to	19,260,
38,251	to	38,370,	22,961	to	23,060,	851	to	950,	9,741	to	9,940,
6,241	to	6,380,	10,381	to	10,390,	19,061	to	19,065,	32,896	to	32,930,
38,981	to	39,020,	32,731	to	32,830,	501	to	600,	8,066	to	8,115,
38,951	to	38,980,	39,591	to	39,640,	9,296	to	9,315,	23,406	to	23,435,
20,651	to	20,750,	25,196	to	25,205,	24,606	to	24,655,	28,921	to	28,970,
19,066	to	19,160,	6,091	to	6,140,	33,331	to	33,430,	34,971	to	35,000,
7,916	to	7,965,	5,091	to	5,240,	29,171	to	29,220,	30,741	to	30,930,
28,971	to	29,020,	10,266	to	10,290,	7,966	to	6,015,	32,631	to	32,730,
3,571	to	3,670,	10,931	to	11,030,	31,621	to	31,670,	21,351	to	21,450,
751	to	850,	2,411	to	2,460,	3,671	to	3,770,	38,371	to	38,400,

20,801	to	20,900,	7,915	to	8,040,	11,180	to	11,260,	19,260	to	35,971 to 36,000,
38,370	to	38,470,	23,060	to	23,160,	950	to	9,040,	35,561	to	35,600,
6,380	to	10,381,	10,390	to	19,061,	19,065	to	32,896,	32,930	to	28,671 to 28,720,
32,731	to	32,830,	501	to	600,	8,066	to	8,115,	19,891	to	20,230,
39,591	to	39,640,	9,296	to	9,315,	23,406	to	23,435,	10,191	to	10,220,
25,196	to	25,205,	24,606	to	24,655,	28,921	to	28,970,	29,051	to	29,065,
6,091	to	6,140,	33,331	to	33,430,	34,971	to	35,000,	29,076	to	29,125,
5,091	to	5,240,	29,171	to	29,220,	30,741	to	30,930,	28,871	to	28,880,
10,266	to	10,290,	7,966	to	6,015,	32,631	to	32,730,	28,981	to	28,920,
10,931	to	11,030,	31,621	to	31,670,	21,351	to	21,450,	5,946	to	5,995,
2,411	to	2,460,	3,671	to	3,770,	38,371	to	38,400,	19,001	to	19,020.

THE DIRECTORS OF THE BIRKENHEAD, LANCASHIRE, AND CHESHIRE JUNCTION RAILWAY COMPANY are desirous of receiving TENDERS for 250 tons of RAILS, delivered at Birkenhead. Particulars to be obtained from the company's engineer. W. JOHNSTON, Sec.

Cathcart-street, Birkenhead.

COPIAPO AND CALDERA RAILWAY.—Notice is hereby given, that the QUARTERLY DIVIDEND of FOUR PER CENT. (declared in Copiapo on the 3d of October last) will be PAID to the holders of shares registered in England, at the Banking-house of Messrs. Williams, Deacon, and Co., on and after the 18th January inst. By order, EDWARD J. COLE.

Office of Registry and Transfer, 2, New Broad-street, Jan. 1, 1858.

COPIAPO EXTENSION RAILWAY COMPANY.—Notice is hereby given, that SIX MONTHS' INTEREST, at the rate of SIX PER CENT. per annum, will be PAYABLE on the deposit of £2 per share, on and after the 1st February next, at the office of the company, 2, New Broad-street.

The scrip must be left at the office, and the necessary form of application for the interest filled up three clear days before the same can be paid.

London, Jan. 1, 1858. By order of the Directors, EDWD. J. COLE, Sec.

COPIAPO EXTENSION RAILWAY COMPANY.—Notice is hereby given, that the directors have made a CALL of ONE POUND per share, payable at the Banking-house of Messrs. Williams, Deacon, and Co., on or before the 25th day of January inst.

The scrip certificates, together with the bankers' receipt, must be left at the office of the company, 2, New Broad-street, to have the call inscribed thereon.

London, Jan. 1, 1858. By order of the Directors, EDWD. J. COLE, Sec.

BOMBAY, BARODA, AND CENTRAL INDIA RAILWAY COMPANY.—Creation of 55,555 New Shares, of £18 each.

The Board of Directors hereby inform the shareholders of the Bombay, Baroda, and Central India Railway Company, that the Hon. East India Company have intimated their approval of an increase of the capital of this company to the extent of £1,000,000, with a guaranteed interest at the rate of 5 per cent. per annum upon such additional capital, on condition that a fourth part of that capital is paid into the Company's treasury on or before the 15th day of March next. It has accordingly been resolved that the said new shares be offered to the shareholders of this company registered on the 15th day of January next, in the proportion of four new shares to every three existing shares, conditionally upon the execution of the Deed of Accession, and conditionally as to parties on the English register of shareholders upon the payment of £4 10s. per share, in part payment of the amount of such new shares, on or before the 16th day of March next, at the Bank of England, Threadneedle-street, to account of this company; and in case of parties on the Indian register of shareholders, conditionally, upon payment to the Oriental Bank Corporation, at Bombay, to the account of this company of £4 10s. per share, at the exchange of 1s. 10d. per rupee, on or before the 29th day of April next.

The parties accepting such new shares may, in addition to the sum of £4 10s. per share, and in anticipation of future calls, pay the further sum of £4 10s., making £9, or £13 10s. per share, and shall be entitled to interest on the amount so paid, in anticipation of calls, at 5 per cent. per annum from the time when the same shall be paid to the Honourable East India Company. With a view to the convenience of parties who may wish to pay the deposit or payments in anticipation of calls before the 16th of March next, the directors have arranged that such payments made into the Bank of England to the credit of this company on or before the 8th or 25th of February next, shall be paid into the treasury of the East India Company respectively on the 10th and 27th of Feb., from which dates the guaranteed interest will accrue.

Circular letters of allotment, with directions for payment and forms of receipt, will be forwarded to the address of the several shareholders whose names shall stand on the register on the 15th day of Jan., 1858.

The Transfer-books of the company will be closed from the 15th to the 22d of January, 1858, both inclusive, for the purpose of preparing the list of shareholders entitled to allotments of the above capital. By order,

C. H. KENNEDY, Sec.

Offices, 10, Liverpool-street, New Broad-street, London, Dec. 31, 1857.

TO IRONMASTERS, ENGINEERS, AND FOUNDERS.—The HARRINGTON IRON COMPANY are now PREPARED to SUPPLY MELTING and FORGE PIG-IRON, made from the rich HEMATITE IRON ORES of CUMBERLAND.—Address, HARRINGTON IRON COMPANY, Cumberland.

AIR SHEETING, or BRATTICE CLOTH, made expressly for COLLIERY PURPOSES, in all widths, from 18 in. to 80 in.—Samples, with price, on application to the manufacturer,

ELLIS LEVER, Ellesmere-place, Stockport-road, Manchester.

INVESTMENTS IN BRITISH MINES.

Full particulars of the most important Dividend and Progressive Mines will be found in the Fourth Edition of

BRITISH MINES CONSIDERED AS AN INVESTMENT.

Recently published, by J. H. MURCHISON, Esq., F.G.S., F.S.S.

Pp. 356; price 3s. 6d., by post 4s.

Mr. MURCHISON also publishes a QUARTERLY REVIEW OF BRITISH MINING, giving, at the same time, the Position and Prospects of the Mines at the end of each Quarter, the Dividends Paid, &c. The REVIEW for the Quarter ending the 30th of June, contains a Map of the Great Wheal Vor and Leisant Mining Districts, price 1s. Reliable information and advice will at any time be given by Mr. MURCHISON, either personally or by letter, at his offices, 117, Bishopsgate-street Within, London, where copies of the above publications can be obtained.

OPINIONS OF THE PRESS.

Mr. Murchison's new work on British Mines is attracting a great deal of attention, and is considered a very useful publication, and calculated to considerably improve the position of home mine investments.—Mining Journal.

The book will be found extremely valuable.—Observer.

A valuable little book.—Globe.

A valuable guide to investors.—Herapath

Mr. Murchison takes sound views upon the important subject of his book, and has placed, for a small sum, within the reach of all persons contemplating making investments in mining shares that information which should prevent rash speculation and unproductive outlay of capital in mines.—Morning Herald.

Of special interest to persons having capital employed, or who may be desirous of investing in mines.—Morning Chronicle.

Parties requiring information on mining investments will find no better and safer instructor than Mr. Murchison.—Leeds Times.

As a guide for the investment of capital in mining operations is inestimable. One of the most valuable mining publications which has come under our notice, and contains more information than any other on the subject of which it treats.—Derby Telegraph.

To those who wish to invest capital in British mines, this work is of the first importance.—Welshman.

This work enables the capitalist to invest on sound principles; it is, in truth, an excellent guide.—Plymouth Journal.

All who have invested, or intend to invest, in mines, will do well to consult this very useful work.—Ipswich Express.

This is really a practical work for the capitalist.—Stockport Advertiser.

Persons desirous to invest their capital in mining speculations, will find this work a very useful guide.—Warwick Advertiser.

It is full of carefully compiled and reliable information relative to all the known mines in the United Kingdom.—Sheffield Free Press.

Those interested in mining affairs, or who are desirous of becoming speculators, should obtain and carefully peruse the work.—Monmouth Beacon.

Every person connected, or who thinks of connecting himself with mining speculations, should possess himself of this book.—North Wales Chronicle.

A very valuable book.—Cornwall Gazette. [Glasgow Examiner.

All who have invested, or intend to invest, in mines, should peruse this able work.

We believe a more useful publication, or one more to be depended on, cannot be found.—Plymouth Herald.

With such a work in print, it would be gross neglect in an investor not to consult it before laying out his capital.—Poole Herald.

Mr. Murchison will be a safe and trustworthy guide, so far as British mines are concerned.—Bath Express.

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THE MINING SHARE LIST.

Shares.	Mines.	Paid.	Last Price.	Present.	Dividends per Share.		Last Paid.
5120	Alfred Consols (cop.), Phillack* [S.E.]	2l. 11s. 10d.	£12⅝	12⅝ 13	£18 1 0	£0 4 0	Dec. 7, 1857.
1024	Balleswidden (tin), St. Just	11¼	4		12 5 0	0 5 0	Jan. 1, 1854.
4000	Bedford United (copper), Tavistock†	2l. 6s. 8d.	6⅛	6 6⅛	9 16 6	0 5 0	Dec. 19, 1857.
240	Boscean (tin), St. Just	20⅝	70	50 75	21 0 0	3 0 0	Sept. 4, 1857.
200	Botallack (tin, copper), St. Just*	91¼	190	180 190	418 5 0	3 0 0	Dec. 15, 1857.
1200	Brightside and Froggatt Grove, Derbyshire.	3	4	3¾ 4	3 0 0	3 0 0	Apr. 30, 1856.
100	Brynford Hall (lead), Flint†	20	40	40	13 0 0	5 0 0	July 31, 1856.
1000	Bryntail, Llanidloes, Montgomeryshire	7¼	2	1 1¼	0 5 0	0 5 0	July 1, 1856.
420	Budnick Consols (tin), Perran	2⅝	6		0 10 0	0 10 0	Mar. 26, 1857.
6000	Bwlch (silver-lead), Cardiganshire	3l. 1s. 6d.	1	1	0 2 6	0 2 6	July 30, 1856.
4096	Calstock Consols (copper)	5	5⅛	5¾ 6⅛ xd	0 2 6	0 2 6	Dec. 23, 1857.
1000	Carn Brea (copper, tin), Illogan	15	45	40 45	237 10 0	2 0 0	Nov. 11, 1857.
2048	Carnyorth (tin), St. Just	4⅛	5⅛	4 5	0 15 0	0 3 0	June 16, 1856.
200	Cefn Cwm Brwyno (lead), Cardiganshire	32	55	43	3 0 0	3 0 0	Oct. 4, 1855.
2000	Collacombe (copper)	5	16	14 15	2 5 0	0 8 0	Dec. 2, 1857.
256	Condurrow (copper, tin), Camborne [S.E.]	20	90	80 85	85 0 0	2 0 0	June 10, 1857.
1055	Craddock Moor (copper), St. Cleer	8	40	37⅛ 40	0 12 0	0 7 0	Nov. 6, 1857.
30000	Craven Moor, Limited (lead), Yorkshire	⅛	¾		0 0 9	0 0 9	Feb. 28, 1856.
128	Cwmystwith (lead), Cardiganshire*	60	140	150	105 0 0	5 0 0	Dec. 16, 1857.
280	Derwent Mines (silver-lead), Durham	300	150	150	122 0 0	10 0 0	June 25, 1857.
1024	Devon Great Consols (cop.), Tavist.* [S.E.]	1	425	420 425	595 0 0	8 0 0	Nov. 20, 1857.
672	Ding Dong (tin), Gulval†	32¾	17⅛	12 15	16 7 6	1 10 0	Mar. 2, 1857.
179	Dolcoath (copper, tin), Camborne*	257¾	200	200 225	943 0 0	8 0 0	Oct. 12, 1857.
12800	Drake Walls (tin, copper), Calstock	1l. 19s.	1⅛	1⅛	0 13 6	0 2 0	Sept. 11, 1857.
800	East Daren (lead), Cardiganshire*	32	100	100	36 0 0	3 0 0	Dec. 10, 1857.
2048	East Falmouth (lead)	2	4	4⅛	0 5 0	0 2 6	Oct. 19, 1857.
128	East Pool (tin, copper), Pool, Illogan*	24¼	340	150 200	295 0 0	2 10 0	Dec. 28, 1857.
1024	East Wheal Margaret (tin, copper)	7⅞	3⅛	2	0 5 0	0 5 0	Jan. 11, 1854.
5700	Exmouth (silver-lead)	4l. 14s.	8		3 7 6	0 2 6	Dec. 23, 1857.
1400	Eyam Mining Company (lead), Derbyshire	5	58	55	16 13 4	1 0 0	Dec. 26, 1857.
4940	Fowey Consols (copper), Tywardreath	4	7	5	41 4 3	0 6 0	Feb. 17, 1857.
4448	General Mining Co. for Ireland (cop., lead).	3⅛	1	2	1 0 8	0 3 3	June 5, 1853.
2000	Goginan (silver-lead), Cardiganshire	11¼	—	2⅛	22 0 0	0 5 0	Sept. 5, 1850.
1024	Gonamena (copper), St. Cleer	13¾	15	10 12	0 7 6	0 7 6	Dec. 21, 1852.
243	Grambler and St. Aubyn (copper)	109⅝	82⅛	82⅛ xd	7 0 0	1 0 0	Jan. 5, 1858.
6000	Great South Tolgus [S.E.]	2⅛	14⅛	14 15	1 9 6	0 5 0	Dec. 17, 1857.
6666	Great Wheal Vor (tin, cop.), Helston [S.E.]	8⅛	1⅛	1⅛ 1⅜	0 5 0	0 5 0	Oct. 22, 1855.
119	Great Work (tin), Germoe	100	140		221 10 0	7 10 0	Feb. 27, 1857.
1024	Herodsfoot (lead), near Liskeard	8⅛	7	7⅛ 7¼	3 2 6	0 10 0	Sept. 23, 1857.
6000	Hingston Down Consols (copper), Calstock	3⅜	4⅛	3⅛ 4	2 16 0	0 2 6	Nov. 25, 1856.
2000	Holyford (copper), near Tipperary	11	8¾		4 2 6	0 5 0	Jan. 28, 1857.
2560	Isle of Man (Limited)*	25	42	42	55 17 3	1 0 0	Dec. 16, 1857.
76	Jamaica (lead), Mold, Flintshire	3l. 13s. 6d.	—		380 0 0	5 0 0	Mar. 10, 1851.
26	Laxey Mining Company, Isle of Man	100	1000	1000	1420 0 0	50 0 0	June 30, 1857.
160	Levant (copper, tin), St. Just	2⅛	90	80 90	1062 0 0	4 0 0	May 12, 1857.
8000	Lewis Mines (tin, copper), St. Erth	6l. 1s. 11½d.	—	⅛ 1	0 10 0	0 10 0	Dec. 20, 1855.
400	Lisburne (lead), Cardiganshire, Wales*	18¾	120	120	304 10 0	3 0 0	Dec. 3, 1857.
6000	Marke Valley (copper), Caradon	4l. 10s. 6d.	2⅛	2	0 5 6	0 3 0	Sept. 7, 1855.
5000	Mendip Hills (lead), Somerset	3¾	1⅜	1¾ 1⅜	1 7 6	0 5 0	May 29, 1857.
5000	Merllyn (lead), Flint	3⅛	⅛	⅜ ⅛	1 11 0	0 2 6	June 22, 1853.
1800	Minera Mines (Limited)	25	90	125	24 2 6	3 2 6	Nov. 11, 1857.
20000	Mining Co. of Ireland (copper, lead, coal)	7	15	15¾	13 7 9	0 12 3	Jan. 7, 1858.
5000	Nanteos and Penrhiw, Limited (£2⅛ shares)	1⅞	1⅛	1⅜ 1⅛	0 1 6	0 1 6	Apr. 30, 1855.
6400	Nether Hearth, Westmoreland	2s.	1⅜	1 1⅛	0 2 0	0 1 0	May 21, 1856.
470	Newtonards Mining Company, Co. Down†	50	35		48 0 0	1 0 0	Oct. 17, 1856.
200	North Pool (copper, tin), Pool	36l. 10s. 3d.	70	60 70	324 0 0	2 0 0	Dec. 26, 1854.
700	North Roskear (copper), Camborne	10	25	20 22⅛	750 0 0	4 0 0	Sept. 26, 1853.
6000	North Wheal Basset (cop., tin), Illo.* [S.E.]	nil.	12⅛	14 15	13 19 0	0 6 0	Oct. 28, 1857.
6400	Par Consols (copper), St. Blazey [S.E.]	1⅛	19⅛	17⅛ 18⅛	31 4 0	1 10 0	Oct. 27, 1857.
500	Peak United (lead), North Derbyshire	7¾	2⅛	2 2⅛	4 10 0	0 10 0	Apr. 12, 1856.
200	Phœnix (copper, tin), Linkinghorne	100	370	370	244 10 0	20 0 0	Nov. —, 1857.
1000	Polberro (tin), St. Agnes (Preferential)	15	—		18 11 9	1 0 3	July 11, 1857.
1772	Ditto (Old and ditto)	—	—		0 10 0	0 10 0	Dec. 1, 1857.
560	Providence Mines (tin), Uny Lelant†	20l. 13s. 2d.	62⅛	65	70 4 6	4 0 0	Nov. 18, 1857.
2500	Rhoswydol and Bacheiddon (lead)	11¼	12		0 13 0	0 3 0	Oct. 21, 1857.
512	Rosewarne United (copper, tin), Gwinear*	12	22⅛	22⅛ 25	32 10 0	1 10 0	June 8, 1857.
12000	Sortridge Consols (cop.), Whitchurch [S.E.]	6s.	1⅛	1⅛	0 10 0	0 2 6	July 27, 1857.
256	South Caradon (copper), St. Cleer* [S.E.]	2⅛	340	340 350	492 0 0	10 0 0	Nov. 24, 1857.
128	South Crinnis (copper), St. Austell	19	285	285	60 0 0	20 0 0	June 18, 1856.
256	South Tolgus (copper), Redruth, Cornwall	16	115	110 120	74 0 0	3 0 0	July 28, 1857.
496	South Wheal Frances, Illogan* [S.E.]	18l. 18s. 9d.	220	210 215 xd	282 5 0	7 0 0	Jan. 4, 1858.
1024	Spearne Consols (tin), St. Just, Cornwall	3l. 12s.	2	1 1⅛	8 8 6	0 2 6	Dec. 10, 1853.
280	Spearne Moor (copper), St. Just†	23l. 7s. 8d.	15		4 5 0	0 10 0	June 13, 1856.
970	St. Aubyn and Grylls (cop., tin), Breage	6l. 8s. 4d.	5	4 4⅛	0 17 6	0 7 6	April 1, 1852.
20000	St. Day United (tin and copper)	2	⅜	¾	0 2 6	0 1 0	Sept. 14, 1857.
94	St. Ives Consols (tin), St. Ives	80	160	150 160 xd	915 0 0	5 0 0	Nov. 19, 1857.
9600	Tamar Consols (sil.-lead), Beeralston [S.E.]	4⅛	1	1	4 13 6	0 2 6	Feb. 7, 1856.
6000	Tincroft (copper, tin), Pool, Illogan [S.E.]	9	3¾	3⅛ 4	6 3 6	0 5 0	April 13, 1857.
572	Trelyon Consols (tin), St. Ives	11⅛	13	14 16	1 15 0	1 0 0	Feb. 21, 1854.
96	Tresavean (copper), Gwennap, Cornwall	42⅛	65	55 65	4677 15 0	5 0 0	June 4, 1855.
120	Trethellan (copper), Gwennap, Cornwall	15⅛	20	15	403 13 6	2 10 0	Apr. 29, 1851.
4000	Tretoil (copper, tin), Bodmin	1l. 3s. 6d.	3	1 1¼	0 5 0	0 5 0	July 8, 1856.
4096	Trewetha (silver-lead), Menheniot, Cornwall	2¼	1	⅜ ¾	1 12 0	0 3 0	April 2, 1857.
100	Trumpet Consols (tin), near Helston	95	50	20	55 0 0	5 0 0	Dec. 20, 1854.
400	United Mines (copper), Gwennap [S.E.]	40	115	110	61 5 0	2 0 0	Feb. 12, 1856.
20000	Vale of Towy (lead), Carmarthen [S.E.]	⅝	¾	¾ 1	0 3 9	0 0 6	June 12, 1857.
512	Wendron Consols (tin), Wendron	23l. 7s. 8d.	40	34⅛ 35⅛	2 0 0	1 0 0	Sept. 22, 1857.
6000	West Basset (copper), Illogan* [S.E.]	1⅛	22⅛	24 25	12 10 0	0 10 0	Nov. 25, 1857.
256	West Caradon (copper), Liskeard [S.E.]	20	110	105 110	285 5 0	2 0 0	Sept. 23, 1857.
256	West Damsel (copper), Gwennap	£10 7	80	75 80	22 0 0	2 0 0	July 20, 1857.
1024	West Providence (tin), St. Erth†	1l. 11s. 7d.	—	2	33 1 9	0 10 0	April 8, 1857.
400	West Wheal Seton (copper), Camborne*	38⅛	300	300 310	102 10 0	8 0 0	Dec. 15, 1857.
228	Wheal Arthur (copper), Calstock	8	6	3¾ 4	6 10 0	0 10 0	Oct. 25, 1855.
240	Wheal Bal (tin), St. Just	6	5		2 0 0	1 0 0	Nov. 14, 1855.
512	Wheal Basset (copper), Illogan* [S.E.]	5⅛	150	160	474 10 0	4 0 0	Dec. 4, 1857.
256	Wheal Buller (copper), Redruth* [S.E.]	5	295	270 290	850 0 0	7 10 0	Nov. 17, 1857.
250	Wheal Clifford (copper), Gwennap	—	250	230 250	42 0 0	3 0 0	Oct. 26, 1857.
960	Wheal Fortescue, Bodmin	nil.	⅜		0 2 4	0 1 6	Jan. 14, 1856.
128	Wheal Friendship (copper), Devon	50	80		2375 10 0	8 0 0	May 10, 1854.
624	Wheal Grylls (copper, tin), Breage	4s.	⅛	⅛	0 2 0	0 2 0	Feb. 24, 1857.
512	Wheal Jane (silver-lead), Kea	3⅛	17⅜	15 17⅛	3 10 0	1 10 0	Oct. 16, 1857.
5000	Wheal Kitty (tin), St. Agnes	4⅛	3⅛	3⅛ 3¾	0 6 0	0 3 0	Mar. 24, 1857.
1024	Wheal Kitty (tin), Uny Lelant [S.E.]	£1 7 2	13	11 13	6 0 0	1 0 0	Sept. 17, 1857.
430	Wheal Lovel (tin), Wendron	33	18		31 0 0	1 0 0	Sept. 5, 1856.
448	Wheal Margaret (tin), Uny Lelant†	19¾	45	42 45	84 0 0	2 0 0	Nov. 25, 1857.
1024	Wheal Mary Ann (lead), Menheniot† [S.E.]	8	45	44 45	32 7 6	2 5 0	Dec. 15, 1857.
80	Wheal Owles, St. Just, Cornwall	70	300	300	220 13 0	5 0 0	Aug. 2, 1857.
240	Wheal Reeth (tin), Uny Lelant	31⅛	20		40 10 0	3 0 0	Aug. 23, 1852.
198	Wheal Seton (tin, copper), Camborne*	107	150	125 135	286 10 0	2 0 0	Oct. 12, 1857.
1040	Wheal Trelawny (sil.-ld.), Liskeard [S.E.]	4⅛	25⅛	27⅛ 30	29 10 0	1 0 0	Oct. 26, 1857.
1024	Wheal Tremayne (tin, copper), Gwinear	11⅛	2	2	10 2 6	0 7 6	Jan. 11, 1854.
4096	Wheal Wrey (lead), St. Ive†	1l. 9s.	5½	5¼ 5⅛	2 10 0	0 4 0	June 16, 1857.
5600	Wicklow (copper), Wicklow	5	31⅛	32¾	27 5 6	1 0 0	July 9, 1857.

[* Dividends paid every two months. † Dividends paid every three months.]

Shares.	Mines.	Paid.	Last Price.	Present.
4096	East Alfred Consols	£1 13 1	2⅛	2 2⅛
85	East Balleswidden, Sancreed	19⅛	17	20
512	East Basset (copper), Redruth	27⅛	92⅛	97 100
1024	East Buller (copper), Redruth	13	3⅛	2¾ 3
6144	East Caradon (copper)	2⅛	1¾	
6000	East Cornwall Cons. (tin & cp.)	2⅛	3	2⅛ 3
5200	East Fowey Consols	1⅛	⅜	⅛
5500	East Frongoch	16s. 6d.	—	¾
4096	East Gonamena (copper)	1s. 3d.	¼	
4000	E. Gunnis Lake & S. Bedf. (cp.)	£3 19 6	1¾	1⅛ 1¼
5000	East Hender (copper), Crowan.	⅛	⅜	⅛
6000	East Kitt Hill (tin)	¾	1⅜	1¼ 1⅜
4096	East Providence (tin), Uny Lel.	¾	2¾	1¾ 2¾
5000	E. Rosewarne (cp., tin), Gwinear	£1 5 6	1	⅛
1000	East Rosewarne (tin), Crowan.	⅛	¾	1
7750	East Sortridge	3s.	¼	
9000	East Tamar (sil.-ld.), Beerferris	£2 16 6	¾	⅛ ¾
256	East Tolgus (copper), Redruth.	47	55	40 45
1000	East Trefusis (copper)	£3 17 10	5	5⅛ 6
119	East Wheal Agar	67	—	10
6000	East Wheal Clifford (cop.), Kea	2	1¼	1¼
2048	East Wheal George (cop.), Devon	£4 6	—	2 2⅛
10000	East Wheal Robert (copper)	⅛	⅜	¾ ⅜
4000	East Wheal Russell, Tavistock.	£4 11	3	3 3¾
5000	Fee Donald (lead)	8s. 6d.	⅛	⅛
512	Forest (copper), Illogan	6	4	4
5000	Fox Tor Alvenny (t. &c.), Limit.	5	3	
5000	Frank Mills, Devon	£3 8 6	4	3¾ 4
5000	Fee Donald (lead)	6	4	4
5000	Garreg (lead), Flint	£2 13 6	⅜	⅛ ¾
4000	Gawton (copper), Tavistock	£3 9 6	1	¾ ⅜
6000	Gellirheiron (sil.-ld.), Cardigan	1	⅜	
1024	Gilmar (tin), St. Erth	£6 16 6	⅜	¾
4096	Great Caradon (copper)	¼	⅜	⅜
20000	Great Crinnis (cop.), St. Austell	1	⅜	¾ ⅜
4000	Great Dowgas	5⅛	3	3 4
15000	Great Hewas United (tin)	£1 17	1¼	⅜
13864	Great Onslow Con., Camelford.	1	⅜	
12000	Great Sortridge, Whitchurch	6s. 6d.	—	
14000	Gt. Tregune Consols, Altarnun.	1	1	1⅛
5120	Great Wheal Alfred [S.E.]	£11 7 5	4	4¼ 4⅛
5120	Great Wheal Baddern (tin)	£3 10 6	¾	¾ 1
6000	Gt. Wh. Busy (cop. & tin), Kenwyn	7	6⅛	7 7¼
1024	Gt. Wheal Fortune, Breage	£25 13 10	7	3⅛ 4⅛
3000	Gwinear Consols (copper)	5	4	
9600	Gwydyr Park Consols, Llanrwst	8s. 3d.	⅛	⅜
512	Halamanning and Croft Gothal	104⅛	2	
8192	Hawkmoor (tin, cop.), Calstock	1¾	¾	¾ 1
100	Herward United (lead), Flint	60	55	55
5000	Holmbush (ld., cop.), Callington	4⅛	2	1¾ 2
6000	Huckworthy Bridge (copper)	5s. 6d.	⅛	⅛ ⅜
5000	Kelly Bray (ld., cp.), Callington	£3 19 6	1⅛	1⅛
2048	Keneggy, Breage	£1 4 7	—	2
6000	Keswick (lead), Portinscale	£4 9 6	1	
6500	Kinnerton, Salop	£1 3	—	1⅛
6000	Lady Bertha (copper) [S.E.]	17s.	⅛	⅜ 1
1024	Leeds & St. Aubyn (tin, cop.)	£12 16 3	3⅛	4¼ 4⅛
1024	Lelant Consols (tin)	27	1⅛	1 1¼
4474	Lambest Consols (silver-lead)	4s.	¼	6s. 6d.
12000	Llandudno (copper)	1⅛	¾	¾ 1
4096	Mainstone (lead), Salop	1⅜	¾	
12000	Maria Consols (silver-lead)	1	1	
1024	Mill Pool (tin, cop.), St. Hilary	£13 16 6	2⅛	2⅛ 2¼
7500	Mixon Great Con. (cop.), Leek	£1 19 2	1	
16000	Mold (lead), Limited	¼	¼	
10000	Molland (cop.), South Moulton.	£1 4	⅜	⅛
4157	Mount's Bay Consols, Marazion	4¼	¼	¾
128	Mulberry Hill (tin), Lanivet	2	—	3⅛
64	Nant-ar-Nelle, Llandovery	31	20	
320	Nent Force, Alston	1	1⅛	
6400	New Crow Hill (lead)	1⅜	1⅛	1⅛ 2
2400	New Machno Slate and Slab Co.	10	9	
8000	New Treleigh Consols, Redruth	⅛	⅛	⅜
4000	New Wh. Vor and E. Wh. Metal	1⅛	3	2⅛ 3
1024	North Buller (cop.), Redruth	£12 13 6	5⅛	4¾
2000	North Downs (cop.), Redruth	5¼	1⅛	1⅜ 1⅛
256	North Fowey (copper)	4⅜	¾	
2500	North Frances (cop.) [S.E.]	7	9⅜	11⅛ 12⅛
1366	North Grambler, Redruth	1¼	1	1⅛
120	North Laxey (lead)	50	55	55
2000	North Levant (tin, cop.), St. Just	6⅛	3¾	3⅛ 3¾
512	North Penhaldarva	1⅛	5	5
1024	North Rosewarne, Gwinear	⅛	¼	
3896	North Tavy (copper)	¼	¾	1¾
1024	North Wheal Busy	£8 0 5	2⅜	2 3
1128	North Wheal Crofty [S.E.]	£7 18 4	5	4
1024	No. Wh. Gilbert (cop.), St. Erth	£1 19	2	
6144	N. Wh. Robert, Sampford Spiney	2⅛	3	3 3⅛
4240	North Wheal Trelawny	2⅜	⅛	⅜ ¾
2400	N. Wh. Unity (cop., tin), Gwin.	1⅛	1	
4096	North Wh. Wrey Cons., St. Ive	11s.	1⅜	⅛ ¼
4096	Okel Tor (lead), Calstock	£3 18	3	
1000	Old Tincroft (tin), Lelant	¼	1¼	1¼
600	Old Tolgus United (cop.), Redr.	50	54	53 55
5538	Old Trewether Consols	£1 5 6	—	
256	Old Wheal Basset, Illogan	10⅛	2	
10000	Pedn-an-drea United (tin)	£2 15 6	1	1 1⅛
36820	Pembroke & East Crinnis (cop.)	£1 7 6	¾	¾
5000	Pencorse Consols, St. Enoder	2⅛	1¾	1¾
4945	Pendeen Consols, St. Just	£1 18 6	3¾	3⅛ 3¾
512	Penhaldarva	4⅛	25	50 55
4096	Penharget and Wheal Wrey	1	—	¾ 1
4228	Penquean, St. Breock	1	⅜	
1200	Penstruthal (copper)	£13 9 3	12	12
100	Pentre Lygan	20	22	
1160	Perran St. George (copper, tin)	21⅛	10	8 10
512	Polbreen	4	4⅜	4½
2048	Ponterwyd (lead), Cardigan	£2 16 6	1	
2400	Porkellis United (tin) [S.E.]	9	5	4 5
560	Pwll-y-Wheel (lead), Mold	£7 12	12	12
4096	Queen of Dart, Ashburton	⅛	1⅛	¾
12000	Redmoor (copper and tin)	—	⅛	⅜ ⅛

Shares.	Mines.	Paid.	Last Price.	Present.
10000	Rheidol United Mine	£1 5 6	1¼	
6000	Rosewall Hill & Ransom United	2	3	2⅛ 3
1024	Rosewarne and Herland United	2⅛	4⅛	4 4⅛
4096	Rosewarne Consols	£1 16	4	5
8000	Round Hill (silver-lead), Salop	1⅛	⅜	
1024	Silver Valley, Truro	£2 4 10⅛	2¾	2 2¼
4000	Sithney Wheal Buller (tin)	£4 2	5	4 5
12000	Sortridge & Bedford, Tavistock.	13s. 10d.	4⅛d.	
6400	South Buller and W. Penstruthal	⅛	2⅛	2⅛ 2⅛
6000	South Carn Brea (cop.) [S.E.]	£2 6 6	4⅛	4 5
6000	South Clifford United, Gwennap	⅜	—	1⅛
6144	S. Condurrow (tin, cop.), Camb.	11s. 6d.	¼	3s. 6d.
3302	South Crenver (copper)	5¼	1⅜	1¼ 1¾
6000	South Cuddra	13s. 6d.	1	⅜ ¾
6000	S. Dolcoath & Carnarther Con.	£1 10 6	3	3
256	South Garras, St. Clement	26	45	25 30
2000	South Gorland	5	4	5
2000	South Herland and Relistian	1	2	
6000	South Hingston (tin), Calstock.	2s.	⅜	⅜ ⅛
6000	South Lady Bertha (copper)	¾	⅜	¾ 1
1024	South Providence (tin), Sithney	£3 7	7	
1105	So. Wh. Crofty (cop.), Illogan	£1 18 10	8	7 8
1024	So. Wh. Ellen (cop.), St. Agnes	£5 1 10	6	5 6
256	So. Wh. Seton (cop.), Camborne	7	10	14
6000	South Wheal Wrey	1s. 6d.	¼	
5208	St. Austell Consols	£3 6	2¾	1¾
920	Stray Park	£6 5 3	4⅜	5
1800	Swanpool, Budock	£11 18 7	2⅜	3 4
2900	Tavy Con. (cp.), near Tavistock	£5 11 6	1	¾ 1
6400	Tees Side (lead), Cumberland	£1 11 6	¼	
1000	Tokenbury Consols, Liskeard	£10 2	1	
6000	Tolvadden, Marazion	—	5⅛	6
1024	Trebarvah, Perranuthnoe	£8 5	3¾	1⅛ 1¾
5000	Treburgett Crowan (Limited)	5	5	
2048	Trehane (silv.-lead), Menheniot	¾	⅜	⅜
5000	Treloweth (copper), St. Erth	£4 8 6	5	
4000	Tresellyn (tin & cop.), Altarnun	1	—	
2048	Trevelyan (tin, copper)		6¼	5
5600	Trevenen and Tremenheere	£3 13 6	1	
6000	Trevone Consols, Padstow	2s.	—	⅜ ⅛
1024	Trevoole, Crowan, Cornwall	10	10⅜	9 10
6400	Trewane United (silver-lead)	1⅛	1⅜	¾ 1¾
6400	Tyne Head (silver-lead)	¼	⅜	⅜ ⅝
4000	Tyn-y-Worglodd (slate), Carna.	5	4⅜	
10000	Tyn-y-berth (slate), Talyllyn	1⅛	⅜	
6000	Virtuous Lady and Wh. Bedford	⅜	⅜	1 1¼
5085	United Mines, Tavistock	1	⅜	⅛
200	Waenlas (lead), Denbigh	7⅛	—	22⅛ [illegible]
960	Wendron United Mines	£1 14	2	2
1024	West Alfred (cop.), Phillack	£33 0 5	32	30 32⅛
2000	West Crinnis & Regent United.	4⅜	4	4¼ 4¾
1080	West Cupid	2⅛	3⅛	3⅛
6400	West Fowey Consols (tin, cop.).	7	7	5⅛ 6⅛
25000	West Par Con. (cop.), St. Blazey	1¼	⅛	¾ ⅜
1024	West Rosewarne United	5	5⅜	4 5
256	West Sharp Tor (cop.), Rellaton	40	40	35
1056	West Stray Park, Camborne	2	5	5
1024	W. Ting Tang (cop.), Gwennap	¼	1	
512	West Wheal Frances, Illogan	43⅛	15	15 16
10000	West Wheal Jane	£2 10 6	—	¾ ⅛
2560	West Wheal Reeth (tin)	1	—	1⅛ 1⅜
500	West Wheal Towan	40	—	
4000	Wheal Addams (copper & lead)	11s.	2⅛	2⅛
6000	Wheal Agar (copper), Illogan	£1 19	3	3
1024	Wheal Annie (cop.), Gwinear	2	¾	⅜
12000	Wheal Bray (copper), Altarnun	£1 2	¾	
256	Wheal Cherry	5	—	5
512	Wheal Clinton (lead)	12	15	
512	Wheal Coates	5	—	
1024	Wheal Constance (silver-lead)	4⅛	4	
4096	Wheal Crebor (cop.), Tavistock	£4 2	¼	⅛ ⅜
5120	Wheal Cupid (copper), Redruth	3¼	3	2⅜ 3⅜
4096	Wheal Edward, Calstock [S.E.]	5⅛	7	7⅛ 8
6000	Wheal Eliza (cop.), Whitchurch	—	⅛	¾
1024	Wheal Ellen (cop.), St. Agnes	£4 2	2⅜	2⅜
1000	Wheal Emily (cop.), Gwithian.	2	3	5
4000	Wh. Emma (cop.), Buckfastleigh	⅜	6	7 7⅛
1070	Wheal Enys (tin), Wendron	£17 3 6	10	
720	Wheal Franco, near Tavistock	20⅛	8	
1536	Wheal Gill	18	⅛	
4000	Wheal Glynn	£1 19	1	¼
6000	Wheal Grenville	£4 15 6	1⅛	1⅜ 1⅜
5000	Wheal Guskus (tin, copper)	3⅜	⅜	⅜
5120	Wheal Harriett, Camborne	£3 10 6	⅜	¼
1000	Wheal Hender, Crowan	£2 12	1¾	2 2⅜
6000	Wheal Jewel (cop.), St. Hilary.	¼	—	2⅛
6000	Wheal Lopes (copper), Devon	16s.	1	
4800	Wheal Ludcott	£2 10 8	1⅜	1⅛ 1¼
1024	Wheal Margery (tin and copper)	11¼	8	7 9
5120	Wheal Marshall, St. Cleer	1	1	1
6000	Wh. Mary Emma (tin), Lydford	4s.	—	6s.
3000	Wh. Maudlin (cop.), Lanivery.	3	1⅛	1⅛
300	Wheal Morgan, Llandovery	5	10	
128	Wheal Polmear, St. Austell	32⅛	33	35
3900	Wheal Pollard	15s. 8d.	¾	⅛ ⅜
2048	Wheal Robins (tin), Liskeard	3	¾	
4000	Wheal Russell (cop.), Tavistock	£2 5 6	⅜	⅛ ⅜
4096	Wheal Sidney, Plympton	£1 18 9	1⅛	1⅜
4096	Wheal Tallack, St. Agnes		¾	1 1¼
6000	Wheal Tehidy (cop.), Illogan	£2 5	2⅜	2
1024	Wheal Thomas, Perran Porth	2	4¾	4¾
4000	Wheal Treeby	⅛	⅛	⅜ ⅛
512	Wheal Trefusis (cop.), Gwenn.	21⅜	7	6⅛
3102	Wh. Unity (cop., tin), Gwinear	£8 19	2¾	2
1024	Wheal Uny (tin, cop.), Redruth	£25 17	7⅜	5
1024	Wheal Venton (silv.-lead), Lisk.	6¾	3	
1024	Wheal Wagstaff, St. Erth	⅜	—	
4096	Wh. Zion (cop., lead), Calstock	£5 16 6	¾	⅛
6000	Whitchurch Consols	1	⅜	⅛ ¾
5000	Willow Bank (lead), Limited	21s.	¾	¾
4096	Wrey Consols, Buckfastleigh	6s. 9d.	2	2
4096	Yarner (copper), Devon	1¼	1⅜	1⅛ 1⅜

, Those mines with [S.E.] appended have been admitted on the Stock Exchange.

FOREIGN MINES.

Shares.	Mines.	Paid.	Last Price.	Present.	Dividends per Share.		Last Paid.
10000	Alten and Quænangen Un. (cop.), Norway	£16⅛	6	6 6⅛	4 5 0	0 15 0	Nov. 21, 1853.
2464	Burra Burra (copper), South Australia	5	127⅛	122½ xd	190 0 0	5 0 0	Dec. 2, 1857.
12000	Cobre Copper Company (cop.), Cuba [S.E.]	40	41	44 46	85 12 0	1 0 0	July 21, 1857.
10000	Copiapo Mining Company, Chili [S.E.]	16	11	11 12	5 8 0	0 10 0	May 9, 1856.
20000	General Mining Assoc., Nova Scotia [S.E.]	20	15½	16⅛	10 5 0	0 15 0	July 7, 1857.
15000	Linares (lead), Pozo Ancho, Spain [S.E.]	3	8¼	8¾	5 2 2	0 5 0	Dec. 24, 1857.
10000	Lusitanian (of Portugal) [S.E.]	1¾	1⅛	⅛ 1	0 6 3	0 2 0	May 25, 1857.
103815	Mariquita and New Granada [S.E.]	1	⅜	⅜ ¾	0 4 0	0 1 0	Aug. 20, 1857.
25000	Peninsular Mining Company (Limited)	¾	¼		0 2 6	0 2 6	Sept. 29, 1855.
10000	Pontgibaud (silver-lead), France [S.E.]	20	5	4⅛ 5	1 0 0	1 0 0	June 26, 1855.
7000	Royal Santiago (copper), Cuba [S.E.]	16¾	2	2 2¼	33 0 0	1 5 0	July 12, 1848.
11000	St. John del Rey	15	12⅛	12⅛ 13⅛	35 7 6	1 0 0	June 19, 1857.
43174	United Mexican (silver), Mexico [S.E.] Av.	28¾	4¾	4⅛ 4¾	1 16 6	0 4 0	Feb. 14, 1853.
88676	North British Australasian [S.E.]	1	⅜	⅜ ⅞	0 1 8	0 1 0	Apr. 17, 1855.

NON-DIVIDEND FOREIGN MINES.

Shares.		Paid.	Last Price.	Present.
20000	Australian [S.E.]	7⅛	⅜	⅜ ¾
40000	Chancellorsville Freehold	1	2s.	1s. 1s. 3d.
60000	Clarendon Consols [S.E.]	⅛	4s.	4s 4s 6d
53040	Cologne Mining Company	£1 4	¾	
350000	Copper Miners of Eng. [S.E.]	Stock	28	26 28
12000	Ditto, Pref., 7½ per cent. [S.E.]	25	27	27
25000	Fortuna	2	1⅛	1⅜ 1⅜
2309	Kinzigthal Min. Ass., Germany	4	1⅛	
25000	Liberty, Virginia	1	—	
40000	London and Virginia	17s.	—	
80000	Mount Carbon (coal), Virginia.	1	—	⅛
60000	New Granada [S.E.]	1	⅜	¼ ⅜
10000	New Grand Duchy of Baden	⅛	⅜	⅜
200000	Nouveau Monde [S.E.]	1	⅛	⅛
100000	Port Phillip	1	⅜	⅛
6000	Rossie and Canada Lead	6	—	
47795	Strathalbyn (Limited)	1	—	
7820	Ditto, Preference, 10 per cent.	1	—	
35425	Wheal Jamaica (copper)	14s.	14s.	16s.
75000	Wildberg (sil.-lead, copper)	2	1	1

PROGRESSIVE MINES.

Shares.		Paid.	Last Price.	Present.
6000	Abbey Consols (lead), Cardigan.	14s. 6d.	1¾	1¾
10000	Angarrack	1	—	1¼ 1⅜
256	Antron Consols	£6 12 3	8	
10000	Arundell (cop.), near Ashburton	2	—	
1000	Ashburton United	2	2⅛	2⅛
899	Balnoon Con. (tin), Uny Lelant	£5 3 6	1	1¼ 1⅛
4000	Ballyvirgin, Co. Clare	£2 3	3¼	
10000	Bampfylde (copper), Devon	⅜	—	¾ 1
1000	Barf (lead), Keswick	1¼	2⅛	2⅜ 2¾
6000	Basset Graze United (cop.), Kea	1⅛	—	
4000	Bedford Consols (copper)	18s.	⅜	¾ ⅞
2200	Benderg (Limited)	1	1	1
250	Berriow Consols	£12 16	10	8
5000	Boiling Well (cop.), Gwithian	3	1¾	1¾
6000	Bolenowe (copper)	£1 17 6	⅜	
1258	Boscaswell	—	—	5 5⅛
2120	Bridford Consols	£8 8	7¼	7¼
4000	Brook Wood, Buckfastleigh	⅜	1	1
2000	Bryn-y-Fedwen (lead)	3⅛	1	
6000	Buckland Consols (copper)	⅛	¼	¼
6380	Buller and Basset United	2¾	3	
1200	Buller and Bertha (copper)	£2 2	1⅛	1 1⅛
5000	Cae-Cynon, Cardiganshire	10s. 6d.	⅜	
400	Calcot Hall (lead), Limited	10	—	
2000	Calstock United (tin and cop.).	6¾	⅛	1 1⅛
1000	Camborne Consols	13⅛	7	7 8
920	Camborne Vean & Wh. Frances	£12 8 9	7	6
1024	Caradon Consols, St. Cleer	11	6⅛	7 7⅛
916	Cargoll (silver-lead), Newlyn	£12 7 3	15	10 12
2580	Carmarthen United (lead)	2⅛	2⅛	4
4370	Carnewas (lead, cop.), Mawgan	13s.	1	¾
7900	Carrack Dews United, St. Ives.	2⅛	—	
1055	Carvannall (copper), Gwennap.	11	5	2 2⅛
6400	Carvath United, St. Austell	2⅜	1	
6400	Castell (lead and blende), Card.	11s. 6d.	⅜	⅛ ¼
12000	Catherine and Jane Consols	⅛	⅛	⅜
6000	Cefn Gwyn (sil.-ld.), Cardigan.	1	⅜	
6000	Chollacot Consols (copper)	3s. 6d.	¾	⅛
1024	Clijah & Wentworth (tin, cp.)	£21 15 6	6	6 6¼
8000	Clowance Wood, Crowan	⅛	—	⅜ ⅛
2450	Cook's Kitchen, Illogan	£16 10 9	5	4⅛ 5
256	Copper Hill (copper), Redruth	43	175	150 175
1000	Cwm Erfin (lead) Cardigansh.	7⅛	6	6
6000	Cwm Sebon (Limited)	£2 6 6	1⅛	1⅛ 1⅜
1000	Daren (sil.-lead), Cardiganshire	6	5	4⅛ 5
4096	Devon & Cornwall United (cop.)	£4 6 3	12	15
3907	Devon and Courtenay (copper).	19s.	⅛	⅛
4000	Devon Burra Burra (copper)	£5 5	—	
10000	Devon Great Elizabeth (copper)	£1 2	—	2⅛ 2⅛
4566	Devon Wheal Buller	£1 18 6	¾	⅛ ⅜
4315	Duke of Cornwall, Lostwithiel	£6 4 4	3¾	3¾
3000	Dyfngwm (lead), Wales	£12 6 5	13⅜	13 13⅛
256	Eaglebrook, Llanphangel, Card.	40	20	18 15

Mining Companies Incorporated with Limited Liability.

	Nom. cap.	Share.	Bus. done.
Acadian Charcoal Iron (6l. paid)	£200000	£6	6
Anglo-French Porcelain	64000	20	
Ballymoneen Copper	20000	2	
Bangor Slate	85000	50	
Bavarian Coal	20000	25	
Berehaven	2000	1	
Bog Mining	30000	£1 10	2
Bon Accord Copper (10s. paid)	75000	1	⅝
Brazilian Land and Mining	50000	5	
Brenkburne Iron and Coal	60000	20	
Bristol and Forest of Dean	25000	1	
Broadmoor	20000	28	
Bronfloyd (4l. 5s. paid)	8000	4	5 5⅛
Brynglas Silver-Lead	6000	£1 10	
Bute Merthyr Steam Coal	50000	20	
Californian Consolidated Quartz	32000	1	
Cambrian Slate	17000	25	
Cardigan South Bog Mining	6000	1	
Castell Lead Mining	6000	1	
Central Italian Copper	50000	2	
Cheesewring Granite	9600	300	
China Clay	10000	50	
Chirk Castle	16000	250	
Clara Silver-Lead (2l. 3s. 6d. paid)	8000	4	2¼
Coed Mawr Pool	20000	5	
College Mines, Ireland (2s. paid)	3000	5s.	5s. 6s.
Copiapo Smelting	100000	10	10 12
Cornwall Great Consolidated Lead, &c.	24000	2	
Cwmdyle Copper	2000	50	
Dale	21000	1	
Dalrhiew (2l. 10s. paid)	15000	5	
Dolwen Lead	5000	1	
Dun Mountain Copper	75000	1	⅜ 1⅛
East Goldscope Mining	4096	2	
East Indian Coal	150000	10	10
English Ridge, Newfoundland (10s. pd.)	2000	1	5
Esgair Llee Mining	10200	10	11 11⅛
Exhall Coal	50000	10	
Forest of Dean and South Wales Iron	250000	10	
Fort Bowen, New	35000	1	
Garnett and Moseley Gold Mining	50000	1	
Great Barrier Land, Harbour, & Mining	50000	5	5¼ 5⅛
Great Caradon Slate	12000	1	
Great Northern Mining	12000	1	
Great Welsh Union Slate	250000	5	
Great Wheal Martha	10000	1	
Harwood	6400	1	
Hendre	16000	250	
Hennock Black Ore	800	10s.	1⅛
Hopton Wood Stone	18000	50	
Island of Anglesea Coal and Coke	50000	5	
Krautscheid	6000	10s.	
Levant Mineral	250000	10	
Little Down and Ebber Rocks	50000	2	2 2⅛
Liverpool and Pwllheli Granite	15000	10	
Llangollen Slate and Slab	30000	100	
Llangynog United Mining	30000	5	
Llwynmalees Mining	12800	10	12 12⅛

	Nom. cap.	Share.	Bus. done.
Loughtea Slate, Tipperary (1l. 8s. pd.)	£10000	£2	1
Low Furness Iron and Steel	60000	10	
Machynlleth Park Copper	2000	1	1¼ 1⅜
Manchester and Festiniog Slate and Slab	75000	10	
Maria Anna and Steinbank Coal	160000	10	
Maria Consols Silver-Lead	13200	1	
Merryfield Mining	30000	1	
Metallurgic	23400	100	
Midland Mining	5250	5	
Millom Mining	6000	1	
Mount Gabriel Mineral	10000	10	
Nant-y-Car (2l. 13s. 4d. paid)	12000	4	2⅜ 2¾
Newfoundland Mining Assoc. (1s. paid)	50000	—	
New Holtzappel Mining	5000	1	
New Machno Slate and Slab	3200	10	
North Staffordshire Coal and Iron	20000	100	
Okehampton	10000	1	
Old Park Iron Company	100000	12	18
Oola	4000	£1 10	1⅛
Orom's Hill	20000	5	
Paragon and Spero Coal	20000	10	
Park Hill	6800	100	
Patent Gold Washing	2000	100	
Penclawdd Colliery	16000	50	
Pen-y-Rhiew Colliery	25000	10	
Piedmontese	65000	1	
Pwll yr Engine Colliery	2500	1	1¼
Quartz Reduction	50000	1	⅜ ¾
Redhill Mining	600	10	
Rhosydd Slate Company	50000	5	
Ritton Castle Mining (1l. 4s. 6d. pd.)	10000	2	1¼ 1⅜
River Tamar Copper	10000	1	
Rotherham and Masboro' Coal	60000	25	
Ruabon Coal Company	10000	10	
Ruardean Colliery (5s. paid)	15000	1	¼
St. Helen's Alkali	33000	6	
Severn Mines	—	—	
Shrewsbury and Shropshire Coal	7000	10	
Shropshire Blackwood	1000	5	3⅛ 4
Smittergill Head Lead	4000	100	
South Bog Lead (5l. 2s. paid)	8450	£6 10	3⅛
South-West of Ireland Mining	15000	£2 10	
Staffordshire Iron Ore	6000	100	
Stoney Way	1000	1	3
Stragdale	7000	1	
Talargoch Mining	44000	10	
Taliesin Silver-Lead	25000	5	
Tassan Mining	20000	1	
Turk's Head (10s. paid)	2000	1	5
Tyne Head	6400	1	
Victoria Foundry	50000	50	
Wadhurst Ironstone	2000	5	
Westbury Iron	18000	1500	
Wharfedale Mining	4000	10s.	
Wheal Henry, Helvellyn, Lead	6000	1	
Whitby Iron	20000	10	
Workington Hematite Iron Company	25000	500	
Worthing	100000	1¼	⅛

, Our object being to make the Share List correct, we earnestly call upon all who have the power, to aid us, by forwarding any alterations or correction which may, from time to time, come under their notice. Reports from mines—in fact, mining information of every description, forwarded to our office, will meet ready attention.

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